DOCUMENT RESUME

ED 426 973 SP 038 268

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TITLE Implementation of the Study of Teaching in the DoDDS-Germany Region.

INSTITUTION National Defense Research Inst., Santa Monica, CA.

SPONS AGENCY Dependents Schools (DOD), Washington, DC.
ISBN ISBN-0-8330-2553-8
PUB DATE 1998-00-00
NOTE 147p.
CONTRACT DASW01-95-C-0059
AVAILABLE FROM RAND Distribution Services, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138; Tel: 310-451-7002; Fax: 310-451-6915; e-mail: order@rand.org; Web site: http://www.rand.org
PUB TYPE Reports - Research (143)
EDRS PRICE EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Collegiality; Elementary Secondary Education; *Faculty Development; Foreign Countries; *School Culture; Teacher Collaboration; Teacher Improvement; Teachers
IDENTIFIERS *Dependents Schools; Germany

ABSTRACT

In 1989, Department of Defense Dependents Schools (DoDDS) implemented the Study of Teaching (TST), a staff development program for administrators and teachers to promote professional collegiality. A 3-year evaluation of program implementation in the Germany Region for the Office of Dependents Education was undertaken. This report documents evolving implementation strategy, participant perceptions, and whether schools changed in support of program goals. TST provides a framework for studying and observing teaching. It promotes teachers using increased awareness and knowledge to select strategies appropriate to the particular needs of their classrooms and students. TST implementation involves coursework and school-based interventions to develop schools into workplaces that encourage continued learning. The 3-year study involved 12 schools in the Germany pilot program. Data collection included 812 administrator and teacher interviews, 15 interviews with DoDDS-Germany regional and district officials, and 26 interviews with the TST coordinator and trainers for DoDDS-Germany. There were also teacher questionnaires, observation of TST-related activities, and relevant documentation from all levels of DoDDS. Results found that the program was a high priority for DoDDs. Most administrators and teachers viewed TST positively, though they had difficulty sustaining some TST-related activities over time. After 3 years, most schools were only somewhat conducive to TST goals. Program implementation was influenced by each school's receptivity to change. Eight recommendations are provided. Three appendixes present data on the number of school-based interviews, school-based interview questions, and teacher surveys. (Contains 10 tables and 12 figures.) (SM)

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Implementation of the Study of Teaching in the DoDDS-Germany Region

Susanna Purnell, Robby Champion, Elizabeth Lewis

National Defense Research Institute

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The research described in this report was sponsored by the Office of the Secretary of Defense (OSD), under RAND's National Defense Research Institute, a federally funded research and development center supported by the OSD, the Joint Staff, and the unified commands, Contract DASW01-95-C-0059.

Library of Congress Cataloging-in-Publication Data

Purnell, S. W.
Implementation of the study of teaching in the DoDDs-Germany Region / Susanna Purnell, Robby Champion, Elizabeth Lewis.
p. cm.
"Prepared for the Office of the Secretary of Defense by RAND's National Defense Research Institute."
"MR-531-OSD."
Includes bibliographical references.
ISBN 0-8330-2553-8
1. Military post schools, American—Germany. 2. Teachers—In-service training—Germany. 3. Teacher-administrator relationships—Germany. 4. Observation (Educational method) 5. School improvement programs—Germany. 6. Educational surveys—Germany. I. Champion, Robby H. II. Lewis, Elizabeth, 1961- . III. RAND Corporation. IV. National Defense Research Institute (U.S.). V. United States. Dept. of Defense. Office of the Secretary of Defense. VI. Title.
LC5081.P87 1998
379.1'51—dc21 97-34880
CIP

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Published 1998 by RAND
1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1333 H St., N.W., Washington, D.C. 20005-4707
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Implementation of the Study of Teaching in the DoDDS-Germany Region

Susanna Purnell, Robby Champion, Elizabeth Lewis

Prepared for the Office of the Secretary of Defense

National Defense Research Institute

Approved for public release; distribution unlimited

PREFACE

In the summer of 1989, the Department of Defense Dependents Schools (DoDDS) began implementing the Study of Teaching, a staff development program for administrators and teachers designed to promote professional collegiality. At that time, RAND began a three-year evaluation of the program implementation in the Germany Region for the Office of Dependents Education (DoDDS-ODE). This report documents the evolving implementation strategy, the perceptions of the participants, and whether the schools changed in support of the program goals. The report should be of interest to staff developers working with or within large school systems, as well as education researchers interested in how systemic programs are implemented at individual schools.

Force Management and Personnel, Office of Dependents Education, sponsored this research, which was undertaken in RAND's National Defense Research Institute, a federally funded research development center supported by the Office of the Secretary of Defense and the Joint Chiefs of Staff. Within RAND, the Defense Manpower Research Center conducted the study.

CONTENTS

Preface iii

Figures vii

Tables ix

Summary xi

Acknowledgments xxi

Abbreviations xxiii

1. INTRODUCTION 1
   Organization of the Report 2

2. DoDDS AND THE STUDY OF TEACHING PROGRAM 3
   DoDDS and the Origins of the TST Program 3
   The Study of Teaching Program (TST) 6

3. STUDY APPROACH AND DATA COLLECTION 11
   School Selection 11
   Interviews 12
   Questionnaires 14
   Observation of Program Events 15
   Documentation 15
   Issues Addressed in the Study 16

4. IMPLEMENTATION IN THE GERMANY REGION 17
   Environment 17
      Other DoDDS Programs and Activities 17
      Persian Gulf War 18
      Drawdown of U.S. Forces in Europe 19
      Turnover 20
   Evolution of the Program Implementation 20
      Emphasis on Increasing Access to the Program 21
      Development of an In-House Cadre of Trainers 22
      Adjustments in TST Courses 24
      Building-Based Facilitators and Study Groups 26
      Office of Dependents Education Activities in the Region 26
      Integration of TST into DoDDS Policies and Practices 28

5. EXPERIENCE OF TST PROGRAM PARTICIPANTS 30
   TST Administrators Course and Classroom Observations 30
   TST Course for Teachers 33
   School-Based TST Activities 36
      Reaching out to the Knowledge Base 36
      Experimentation 38
      Peer Observation 38
   Principal's Actions Toward Change in the School Culture 41
   Conclusions and Recommendations 45

6. TST STUDY GROUPS 47
   Building-Based Facilitator (BBF) 49

Job Description 49
Selection and Turnover 50
Training 51
History of the Study Groups 52
Year 3 Study-Group Profiles 54
Future of the Study Groups 60
Leadership 60
Scheduling 61
Content and Structure 62

7. THE PROMOTION OF COLLEGIALITY 65
Description of School Characteristics 66
Comparison of Baseline, Year 2, and Year 3 School Characteristics 71
Description of Schools by Patterns of Characteristics 77
Schools with Less-Conducive Patterns 78
Schools Somewhat Conducive to TST 79
Schools Very Conducive to TST 80
Schools with a Mixed Pattern 82
Contextual and Other Factors 83
Conclusions and Recommendations 84

8. LESSONS LEARNED 87
Communication 88
Depth of Interventions 89
Program Reinforcement 90

A. NUMBER OF SCHOOL-BASED INTERVIEWS 93

B. SCHOOL-BASED INTERVIEW QUESTIONS 94

C. TEACHER SURVEYS 105

FIGURES

2.1. RBT Illustration of the Parameters of Teaching 7

2.2. RBT Schema of TST Program Design 10

5.1. Experience of Teachers Observing Other Teachers in the 12 Pilot Schools 40

7.1. Baseline Characteristics Influencing Program Implementation in the 12 Schools 72

7.2. Year 2 Characteristics Influencing Program Implementation in the 12 Schools 73

7.3. Year 3 Characteristics Influencing Program Implementation in the 11 Schools 74

C.1. Trained from 1991 Versus Trained from 1992 on the Talking Dimension--All Schools Combined 116

C.2. Trained Classroom Teachers from 1991 Versus 1992 on the Talking Dimension--High Schools Only 117

C.3. Informal Versus Formal Talking for 1991 and 1992 Trained Only--All Schools Combined 119

C.4. Individual Versus Group Efforts for 1991 Versus 1992 Trained Only--All Schools Combined 121

C.5. Trained Versus Nontrained on the Observing Dimension for 1991--All Schools Combined 122

C.6. Formal Versus Informal Teaching for 1991 and 1992 Trained Only--All Schools Combined 123

TABLES

3.1. Summary of Field Interviews 12

3.2. Faculty Interviews at the 12 Pilot Schools 13

4.1. Changes in School Personnel 21

6.1. Profile of Year 3 Study Groups 55

6.2. Study-Group Attendance in Year 3 59

7.1. Characteristics of the 12 Schools 67

7.2. Changes in Patterns of School Characteristics Influencing Program Implementation 76

7.3. School Characteristics Influencing Program Implementation Over Time 76

A.1. Interviews at the 12 Pilot Schools 1990-1992 93

C.1. Frequencies of Teachers for 1991 and 1992 115

SUMMARY

In 1989, the Department of Defense Dependents Schools (DoDDS) began implementing the Study of Teaching (TST), a commercial staff development program for teachers and administrators. DoDDS identified three program goals: developing individual teachers professionally; training administrators to become more knowledgeable classroom observers; and most importantly, strengthening the collegiality among teachers and administrators, thereby improving the school culture in support of continuing professional development. As part of the implementation design, DoDDS contracted with RAND to evaluate the implementation of TST over a three-year period, from the summer of 1989 through the spring of 1992. This report documents the RAND evaluation.

TST provides participants with a framework for studying and observing teaching. The framework organizes teaching into several parameters that define the management, instructional, and curriculum aspects of the job of teaching. TST does not advocate a specific prescription for teaching. Rather, the program promotes teachers using increased awareness and knowledge to select strategies appropriate to the particular needs of their classrooms and students.

The implementation of TST involves both course work and school-based interventions to promote the overall goal of developing the school into a workplace encouraging continued learning. Separate program courses for administrators and teachers provide a common vocabulary for communication about teaching and introduce administrators to a method for observing and documenting classroom observations. School-based activities for teachers, such as peer observations and collegial study groups, promote teacher experimentation and sharing of ideas and experiences. The model assumes that principals and other supervisors provide teachers with useful feedback and a supportive environment in which to risk experimentation and promote collegiality.

RAND STUDY APPROACH

Although DoDDS implemented TST worldwide, the RAND study was limited to Germany, the largest of the five regions in the DoDDS system. Using field data collected annually, the study analyzed the experiences of 12 schools in the Germany pilot program.[1] DoDDs chose 12 schools, which represented a range of school characteristics in terms of size, grade level, and geographic location. The data collected over the three years included 812 interviews with administrators and teachers at the 12 schools, 15 interviews with DoDDS-Germany regional and district officials, and 26 interviews with the TST coordinator and trainers for DoDDS-Germany. Other sources of data included questionnaires filled out at the end of each teacher interview, observation of TST-related activities, and relevant documentation from all levels of DoDDS.

The information was used to track the experiences of the schools over time and was applied to four views of the implementation. First, the data were used to trace the evolution of the program implementation in the Germany Region, including the changes made in other regional policies and programs to support the implementation. Second, the study tracked the experiences of the participants, emphasizing their perceptions of the intent and success of the program implementation. Third, the study analyzed the TST study groups established at each of the pilot schools, contrasting the intent of the groups with the actual implementation. Finally, the study tracked changes in the characteristics of each pilot school relative to promoting TST to see if the implementation had resulted in schools more conducive to promoting collegiality in the workplace.

EVOLUTION OF THE PROGRAM IMPLEMENTATION

The implementation of TST received strong backing from the highest levels of both DoDDS worldwide and regional leadership. The program was a high priority, and emphasis was placed on expanding program course offerings as rapidly as possible with the goal of giving every teacher and administrator in the region access to TST courses. The Germany

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[1]One of the 12 schools, Schwäbisch-Gmünd Elementary School, was closed in June 1991.

Region accomplished this directive through several strategies: increasing the number of TST trainers, focusing trainers' time on teaching the course at the expense of spending time in each school facilitating school-based TST activities, conducting courses near the schools to ease logistic impediments to course attendance, and establishing paid extracurricular positions for teachers as building-based facilitators (BBF) at each school to help organize TST study groups. In addition, district superintendents began incorporating support of TST into the evaluation of pilot-school principals and including discussion of TST in districtwide meetings. Finally, the Office of Dependents Education (ODE) began centralizing aspects of the implementation across all the regions. ODE also provided additional training to the TST regional trainers and pilot-school principals.

The implementation strategy successfully provided the TST introductory coursework to a substantial percentage of the target population in a relatively short time. At the end of the three years, about 40 percent of the teachers (approximately 2,500) and all the administrators in the Germany Region had taken or were taking the TST course. However, the emphasis on providing the course was at the expense of more extensive follow-up activity by the regional trainers at the school level. Because TST was treated as a separate program within the region instead of being integrated into other regional and district initiatives, teachers and administrators often viewed it as an add-on requirement.

Finally, the implementation took place at a time when outside events, such as the Persian Gulf War and post-Cold War reduction in troops, made it more difficult to maintain a sense of normalcy for students and staff.

EXPERIENCE OF TST PARTICIPANTS

Administrators and teachers generally viewed the TST program positively. However, participants experienced difficulties sustaining some of the TST-related activities beyond the course work.

Experience of Teachers

Approximately two-thirds of the teachers in the 12 pilot schools participated in TST program-related activities. Teachers generally perceived benefits from the TST course that extended to their own practices and/or school. In the third year of the study, one-half of the teachers interviewed indicated they had adopted some of the practices demonstrated in the course. When asked how TST had affected the school as a whole, one-third cited the use of TST vocabulary as a common language, and one-third perceived an increased sharing and openness among the staff. Teachers indicated that they felt more empowered to experiment with new techniques, especially since administrators had received similar training.

Most negative comments were coupled with a perception on the part of teachers that they had been coerced into attending TST courses or participating in TST activities. These teachers, usually the last members of a school staff to participate in TST, tended to approach the experience with a skeptical attitude that lasted beyond the course.

Teachers indicated limited follow-on for two activities encouraged by the course. First, teachers rarely used the framework provided by TST to initiate their own explorations of the research on teaching. Rather, they depended on others, such as the regional trainers or BBFs, to provide synopses of the research. And second, teachers infrequently continued peer observations beyond the TST course assignments. Although teachers were enthusiastic about conducting peer observations, they cited the lack of time and reduced incentive once the course was completed as reasons for failing to continue the practice.

Experience of Administrators

Administrators incorporated elements of TST in their practices but often did not view and support TST as a program to change the school.

All the administrators in the study were required to take the TST course, which included a model for classroom observation. The extent to which administrators used the model varied. However, most teachers--both trained and nontrained in TST--noticed some changes in the behavior of administrators, especially the taking of literal notes during the

observation.[2] In addition, teachers noted administrators exhibited a greater tendency to focus observations on the actual teaching than on other elements of the classroom environment.

Throughout the three years of the study, principals appeared uncertain about whether and how to promote TST within the school. The TST course for administrators did not train administrators on this aspect of the program. Principals' actions in support of TST program goals were classified into four general behavior patterns. *Laissez-faire* principals had low involvement in the program beyond enrolling teachers in the course. *Coercive* principals actively promoted TST by making teacher participation in the program an expectation or requirement, a stance that usually fostered resentment and lack of program ownership among teachers. *Cheerleader* principals enthusiastically promoted TST not by requiring participation but by finding ways to make teacher participation in the program easier. *Participatory* principals demonstrated the behavior of cheerleader principals but also looked for ways to integrate TST into the overall school agenda and goals. In assessing the progress of TST in the pilot school, schools experiencing the greatest difficulties in implementing TST had coercive or laissez-faire principals. Cheerleader and participatory principals were much more effective in promoting the program. By the third year, the principals in the study had abandoned coercive approaches and the majority were cheerleaders.

TST STUDY GROUPS

A key TST component at the school level was the establishment of a study group, a volunteer group of teachers who agreed to meet regularly to study aspects of teaching derived from the TST conceptual framework. As early as the first year, the pilot schools began forming study groups under the leadership of the TST regional trainers. It was not until the third year that most schools had relatively self-sufficient study groups organized by BBFs, a position created by the region to help support TST

[2] *Literal notes* refers to the taking of verbatim notes of what is said or done, rather than notes of subjective interpretations of what happened. Thus, these notes provide a specific, nonjudgmental record to facilitate later discussions.

school-based activities. In the third year, over half of the study groups had a routine or usual meeting time and an average attendance of one-third or more of the trained teachers in the school.

Despite progress, the study groups faced a number of challenges. First, scheduling time for the meetings in the face of competing activities was a significant hurdle to teacher participation. Second, BBFs tended to run the groups rather than play the role of facilitators and team builders. Finally, and most importantly, the groups had difficulty focusing the meetings on a meaningful study of aspects of teaching. The shortness of the meetings, coupled with fragmented agendas, steered the meetings toward exchanging "tidbits" of information rather than concentrated study. As study groups increasingly relied on resources within the school, the meetings often became another in-service, with one teacher sharing what they learned in a workshop or meeting outside the school.

CHANGES IN SCHOOL CHARACTERISTICS

The overarching goal of TST was to change the school culture so that the school as a workplace becomes supportive of continued professional learning and growth. The study developed annual snapshots of changes in characteristics supporting this goal at each of the 12 schools for the three years of the study. The schools were characterized in terms of the patterns of interaction among the staff, the competing and complementary influences on the school environment, the expectations of administrators for TST, the expectations of the faculty for TST, the principal's actions concerning TST, and the experience of the study groups. Descriptions of these characteristics provided the basis for labeling each school *less*, *somewhat*, or *very* conducive to the program goals. If a school exhibited the extremes of both *less* and *very* conducive characteristics, the snapshot for that particular year was labeled a mixed pattern. The expectation for the study was that schools would move toward being *very* conducive to the program.

The results after three years illustrated how difficult it is to sustain school-level change. As anticipated, the schools started out at

different levels of conduciveness to the program goals; in the second year, there was a general shift toward *somewhat* and *very* conducive characteristics. In the third year, however, that overall trend was changed, with the majority of the pilot schools being described as having characteristics *somewhat* conducive to the goals of TST.

Several factors help explain why more schools did not shift into the *very* conducive category. Competing activities and programs often diverted the attention and focus of the participants. The anticipation of the drawdown of the DoDDS system in Germany tended to preoccupy the environment in a number of schools in the study to the detriment of implementing TST. In addition, many of the schools did not make the transition into the *very* conducive category because the expectations for TST on the part of the principal and faculty did not include changing the school culture. Conversely, schools became more receptive to the design when the school leadership envisioned the program changing the school culture and found ways to make other activities and initiatives in the school complement TST.

Finally, the data underscored the extent to which the program's implementation was influenced by a school's receptivity to change.

STUDY RECOMMENDATIONS

As DoDDS continues to implement TST in all the schools, the experience of the pilot schools in Germany provides some lessons:

1. **Improve the introduction of the program.** DoDDS needs to present the goals of the program clearly to the administrators and teachers from the outset. The temptation to put all the resources into offering the course should be resisted, and more time should be devoted to setting up the implementation at each school.
2. **Ensure that teacher participation is voluntary.** DoDDS leadership should avoid sending administrators mixed signals about teacher participation. Principals should understand that, while DoDDS values widespread teacher participation in

the program, this does not mean that principals can require or coerce that participation.

3. **Customize the implementation to the receptivity of each school.** Implementation would be improved if needs assessments were made prior to the implementation and if regional support were adjusted to the varying needs of the individual schools. Schools should develop their own action plans for TST implementation, thereby increasing the ownership of the program and tailoring the program to that school's needs.
4. **Provide more support for school-based activities.** Teachers need time and encouragement to continue such school-based activities as peer observation and experimentation with new techniques. The more such practices are promoted through other activities going on in the school, the more likely teachers will adopt them as part of their professional lives.
5. **Train administrators as program promoters.** Administrators need not only to have a clear vision of the purpose and design of TST but also to receive training on how they can promote TST as a school-based initiative.
6. **Provide guidance concerning classroom observations.** Confusion persists concerning this element of the program. Standardized guidance to all administrators and teachers would promote a more coherent systemwide approach.
7. **Develop BBFs in new teacher leadership roles.** BBFs play a key leadership role in making study groups a viable part of the school. To help groups become more self-sufficient, BBFs have to develop more participatory rather than directive styles of leadership. To assist this transition, BBFs need more training as facilitators and in team building.
8. **Realign the content and structure of the study groups toward the goals of TST.** If the study groups are to become a long-term activity in support of TST, teachers must perceive the group as a worthwhile use of time. Desirable changes include a routine meeting time with no competing school activities, a less fragmented agenda, direct links between the study groups

and teachers doing experiments and peer observations, and study content that focuses only on teaching.

ACKNOWLEDGMENTS

The authors acknowledge the vision and support of the ODE in initiating and funding this independent evaluation of program implementation. In particular, we thank John Stremple, Director of DoDDS at the time of the study; Bartley Lagomarsino, Deputy Director and project officer for the study; and Mary Johnson, Director of Evaluation and liaison for the study. In addition, the Education branch, headed by Shirley Makibben, provided useful review and feedback during the course of the study.

The authors thank J. H. Blackstead, Director of the DoDDS-Germany Region, for all his help and cooperation in the conduct of this study. We are also grateful to Herman Saettler, Branch Chief of the Education Division during the first years of the study, and Allen Haymon, TST Program Coordinator, for facilitating the scheduling and conduct of our field trips, an invaluable assistance when researchers are located six time zones and a continent away. Finally, we could not have done this study without the generous time given by the teachers, administrators, and trainers who agreed to be interviewed. We appreciate the willingness to disrupt their schedules and provide us with such thoughtful responses and observations.

A number of RAND staff also contributed to this study. In particular, Paul Hill helped with the research agenda and provided assistance throughout the project. Bernard Rostker contributed thoughtful reviews of all the draft reports, while Abby Robyn and Randy Ross provided very helpful technical reviews of the final draft. Lin Liu and Sally Stoecker assisted in the field work.

Finally, special thanks are due our former colleague, Arthur Wise, as the original leader and designer of the study.

ABBREVIATIONS

BBF	Building-based facilitator
CEIJ	Claims, Evidence, Interpretations, and Judgments
CONUS	Continental United States
DoDDs	Department of Defense Dependents Schools
ES	Elementary school
HS	High school
MS	Middle school
NCA	North Central Association of Colleges and Schools
ODE	Office of Dependents Education
PTO	Parent-Teacher Organization
RBT	Research for Better Teaching
RIF	Reduction in force
SIP	School Improvement Program
SY	School year
TST	The Study of Teaching

1. INTRODUCTION

Interest in using formal staff development, as a vehicle for improving the nation's schools, grew tremendously during the 1980s. Along with the growing awareness of the need to invest in retooling the skills of educators has come a growing understanding of the complexity of developing and implementing effective staff development programs. Michael Fullan has observed that too often the effectiveness of staff development is limited not only by making it a series of separate, unconnected programs but also by not "working more organically with the school as an organization."[1]

The Department of Defense Dependents Schools (DoDDS), the overseas school system designed to serve the dependents of military and civilian employees, began implementing a commercial staff-development program for administrators and teachers called the Study of Teaching (TST) in the summer of 1989. The program was adopted primarily to foster greater staff collaboration and school renewal. TST consists of formal courses and school-based activities intended to promote the study of teaching as an ongoing part of the school as a workplace. DoDDS defined its program goals to include developing individual teachers professionally; training administrators to become more knowledgeable classroom observers; and most importantly, strengthening the collegiality among teachers and administrators, thereby improving the school culture.

As part of the overall implementation design, DoDDS contracted with RAND to evaluate the implementation of TST over a three-year period, from the summer of 1989 through the spring of 1992. Although DoDDS initiated TST worldwide, the geographic scope of the study is limited to Germany, the largest of the five regions in the DoDDS system. Using field data collected over time, the study analyzes the experiences of 12 schools in the Germany pilot program.

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[1]Michael Fullan, "Staff Development, Innovation and Institutional Development," in Bruce Joyce, ed., *Changing School Culture Through Staff Development*, Alexandria, Va.: Association for Supervision and Curriculum Development, 1990.

Over the course of the study, RAND has followed a two-track approach in reporting results of the evaluation. Interim observations concerning how effectively the program design and delivery succeeded in furthering implementation goals were made available to the Office of Dependents Education (DoDDS-ODE) following both the first and second years of data collection. This formative element of the evaluation was intended to provide DoDDS with useful input as the basis for any midcourse corrections in program delivery. This final report paints a broader picture of the implementation over the entire three years. The purpose is to provide DoDDS with a useful analysis of the implementation from the perspective of both individual program participants and the school as a whole. Although the conclusions reflect a fairly unique school system, this evaluation addresses issues that face most school districts trying to implement major changes in the school culture through staff development.

ORGANIZATION OF THE REPORT

This report chronicles the introduction of TST to the Germany Region pilot schools and documents the three-year evaluation of that implementation. The following section provides background information describing TST and the specific goals of the implementation for DoDDS, while Section 3 details the design and methodology of this study. Section 4 documents how the program was delivered during the first three years in the Germany Region, including adjustments made in DoDDS policies and practices to facilitate the implementation. The experiences of teachers and administrators participating in the TST course and related school-based activities are described in Section 5. Section 6 examines the organization and evolution of collegial study groups, the primary vehicle for promoting program institutionalization at the building level. In Section 7, the relationship between the implementation of TST and the school as a whole is analyzed in terms of any evident changes in each school's promotion of program goals over a three-year period. Section 8 integrates the findings of the previous three sections and identifies the lessons learned. The appendixes document interview guides and surveys used in the study.

2. DoDDS AND THE STUDY OF TEACHING PROGRAM

This section provides some background information on DoDDS and the concerns that prompted the DoDDS leadership to initiate a worldwide staff development program. The basic premises and program elements of TST are also introduced.

DODDS AND THE ORIGINS OF THE TST PROGRAM

The TST program represents the first time DoDDS ever implemented a staff development initiative for its entire school system. The following factors indicate unique characteristics of the DoDDS system which help explain why staff development had been more decentralized prior to 1989:

- *Size:* In 1989, DoDDS provided K-12 education for over 150,000 students located in 19 countries. This made it the ninth largest U.S. school system, as well as the most geographically dispersed.
- *Administration:* Above the school level, DoDDS Administration fulfills the role of both state and local education agencies. Housed in the Department of Defense, DoDDS includes several layers of administration. The central office, ODE, is located in suburban Washington, D.C. In 1989, the system had five regional offices, which fielded 17 smaller district offices. Day-to-day operations of the schools are the responsibility of the regional director and district superintendents.
- The majority of school-based administrators--the principals, assistant principals, and education program managers--were originally DoDDS teachers who advanced through the system's Educator Career Program.
- *Teachers:* In 1989, about one-third of the 9,800 DoDDS teachers had been recruited in the United States as permanent employees. The remaining staff, usually military spouses, had been hired overseas on either a temporary or permanent status. Permanent

employees qualify for relocation and other entitlements not offered temporary staff.

Traditionally, staff development programs have been sponsored at the regional level and, therefore, subject to some variation. Regions frequently contract with stateside consultants to present workshops and compressed courses in the region. Regional coordinators provide training in new curricula and pedagogical approaches, but only a few regions included the position of staff development trainer as part of the regional staff. All the regions provide in-service days.

DoDDS faculty also pursue staff development on their own to upgrade their own skills and to meet the DoDDS recertification requirement of earning 6 hours of credit within a five-year period. Some DoDDS teachers attend university courses stateside during the summer or on sabbatical leave. During the school year, many teachers take advantage of the U.S. university campuses that serve the American military and civilian populations in the area. For example, in Germany, the University of Maryland has an installation at Munich, as does Boston University at Heidelberg. The National University at St. Louis offers a Masters in Teaching program; classes meet in several DoDDS schools.

ODE made the decision to introduce TST as a worldwide staff development program. The adoption of TST reflected an effort to address several systemic concerns. In 1988, the North Central Association of Colleges and Schools (NCA), which reviews the accreditation of schools within the DoDDS system, conveyed some general observations based on that year's review of 49 schools. NCA concluded that these were good schools that could become even better through increased staff development. NCA suggested that assistant principals and education program managers receive more preparation for their supervisory roles and that principals devote more time and effort to leadership rather than management functions. NCA also observed that teachers appeared to be pursuing their classroom activities in an isolated fashion, with no view toward renewal or collaboration aimed at improving classroom instruction. It was suggested that teachers and administrators could

benefit from staff development programs linked to the processes of school effectiveness and staff evaluation.

In September 1988, DoDDS completed a Management Improvement Plan, which addressed a broad range of concerns, including the organization's perceived disjointed and unfocused approach to staff development. Primary emphasis was given to improving classroom instruction and the evaluation process. The plan flagged the need to improve the instructional supervision techniques of principals. Upgrading school-based administrators' observation skills was viewed as a prerequisite to getting principals to increase the time spent observing and conferencing with teachers. The plan also called for teachers and administrators to receive common training on the teaching practices that promote effective instruction.

ODE selected TST as the first systemwide staff development program for both administrators and teachers on the recommendation of the representative Staff Development Committee, formed to review ways of revitalizing staff development across the regions. Initially, DoDDS identified three goals for the program: (1) to aid teacher development, (2) to train all administrators to become more knowledgeable observers, and (3) to strengthen collegiality among administrators and teachers.

The second goal proved to be particularly controversial. Classroom observations by administrators make up part of the annual evaluation of every teacher in DoDDS. ODE saw the upgrading of the observation skills as linked to improving the evaluation process and, in fact, required all administrators in DoDDS to be trained in the program. Representatives of the teachers' union wanted to make sure that teachers had an opportunity to be trained in the same program as the administrators lest the teachers be held accountable for unfamiliar teacher practices. The union wanted the staff development program decoupled from the evaluation process until teachers were also trained in the program. ODE had already decided to make the program training available to every teacher in DoDDS. Although teacher enrollment in the program was to be on a voluntary basis, ODE put a high priority on getting as many teachers as possible as quickly as possible to participate in TST. To encourage

teacher participation, teachers taking the TST course could earn four hours of college credit from Boston University.

As the TST program evolved during the first year of implementation, ODE maintained its support for all three goals of the program. However, the third goal--improving the collegiality among administrators and teachers--became the overarching vision of improving the school culture and was seen as the primary objective of the worldwide staff development program.

THE STUDY OF TEACHING PROGRAM (TST)

TST is marketed by Research for Better Teaching (RBT), a Massachusetts-based organization under the direction of Jon Saphier. RBT contracts with school systems to assist in the areas of concern identified in the DoDDS Management Improvement Plan: supervision, evaluation, and staff development.[1] To accomplish this, RBT has developed training courses, materials, and implementation strategies.

The basic approach of this commercial program is to provide participants with a framework for studying and observing teaching. RBT conceptualizes the organization of teaching into various parameters that make up the management, instructional, and curriculum aspects of the job of teaching. The RBT visual image of this organization is found in Figure 2.1. Teaching practices within each parameter are conceptualized in terms of basic missions, repertoires, and matching student needs. That is, to achieve certain goals or missions, teachers can choose from a whole range of strategies. The choice is made in the context of what matches or is appropriate for that specific set of circumstances. TST, therefore, advocates no specific prescription for teaching. Rather, the objective of the program is to promote an awareness of the repertoires that exist for various aspects of teaching to better match strategies to the particular needs of classes and students.

By classifying the elements of teaching, the program creates a structure for studying teaching that has great flexibility. Existing models of teaching or instructional techniques, including techniques in

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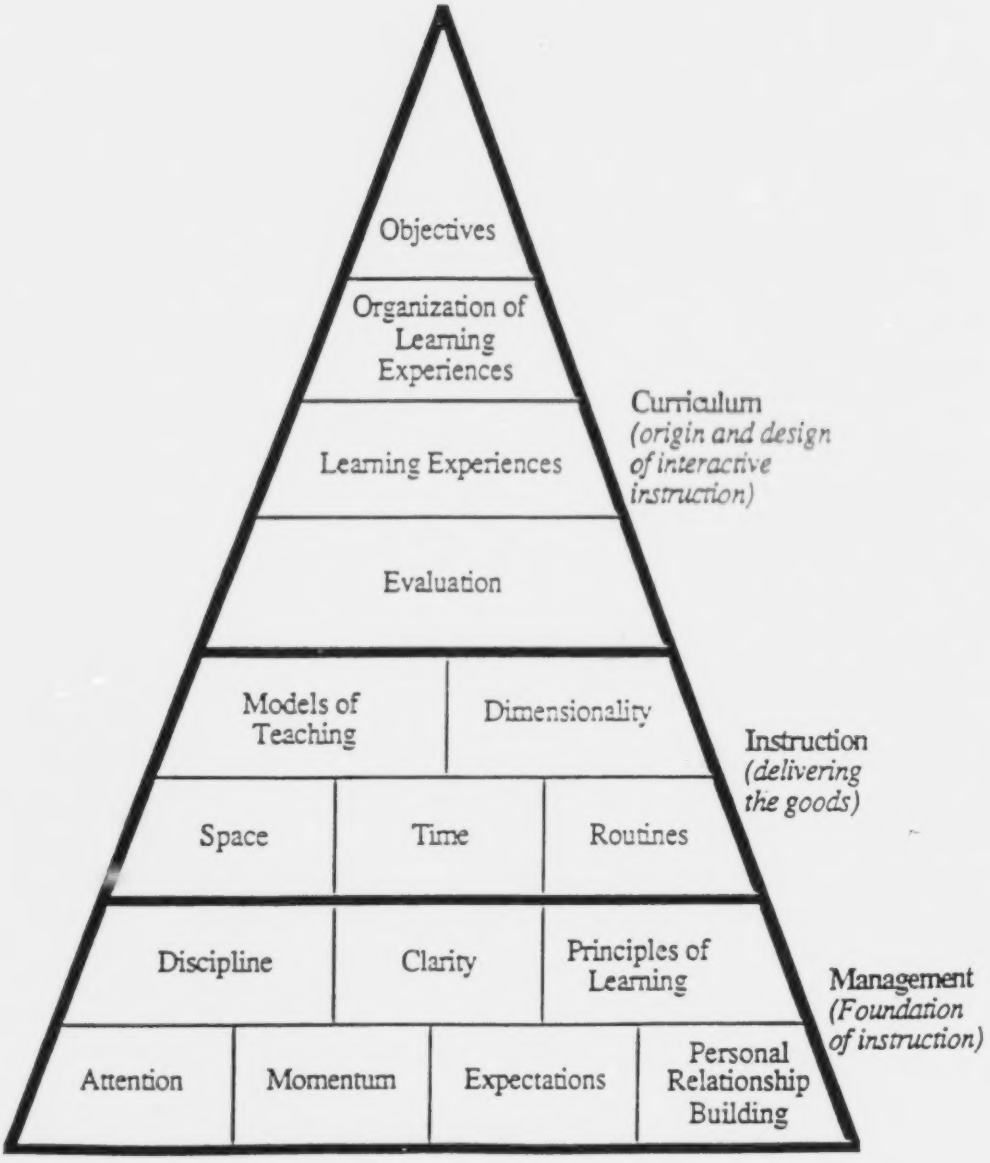
[1]The RBT program generally is known as *Skillful Teacher* in the United States.



NOTE: The pyramidal image represents a progression from the basic management parameters, which comprise discrete, observable skills by which a teacher manages a classroom moment from moment to the instruction parameters that orchestrate teaching skills in a coherent, purposeful package over a sustained period. Finally, the curriculum skills provide the overall framework and objectives that the rest of the parameters serve.

Figure 2.1--RBT Illustration of the Parameters of Teaching

other staff development programs, are subsumed into a review of repertoires in the relevant category. For example, in dealing with the process of delivering clear instruction under the parameter of clarity, RBT summarizes a wide range of approaches and research on how teachers can present new material, explain concepts, give directions and deal with student confusion. Specific approaches range from the use of mental imagery to dipsticking, in which the teacher periodically asks students to give a signal, such as a thumbs up, to indicate their understanding of what is being presented. The content of TST can be updated by incorporating new approaches and research into the examination of the appropriate parameter.

As contracted by DoDDS, the TST program comprises the following activities:

- A course for administrators, *Observing and Analyzing Teaching*, labels and introduces teaching repertoires and matching strategies from selected parameters. It also introduces a method for observing and documenting classroom observations. Participants do follow-on practice in classroom observation back in their own schools. This eight-day course was expanded to nine days in Year 2 of the implementation.
- A seven-day course for teachers, *Understanding Teaching*, labels and introduces the same teaching repertoires and matching strategies as the administrators' course. Teachers also practice conducting peer observations. Teachers are required to do classroom experiments, including peer observations, as homework assignments.
- Collegial study groups are the major school-based component of the program. Ideally, these are small self-organized groups of up to 12 teachers meeting on a regular basis to share experiments and learn new strategies. Administrators can also participate.
- Trainers not only present the course but also act as resources for building-level activities. In the latter role, they present introductory overviews of the course to interested

faculties and help organize study groups. RBT has a process for preparing personnel from the contracting school system to become certified trainers for the program.

There are significant differences between the program goals for the courses taught administrators and those developed for the teachers. Administrators are expected to master the skills associated with the observation model. In contrast, the purpose of the teachers' course is not mastery but rather awareness of teaching strategies.

TST program elements fit into an overall program design in which the goal is to influence the school as a workplace that encourages continued professional growth and learning. The program courses and accompanying textbook[2] provide a common vocabulary for communication about teaching. School-based activities, such as peer observations and collegial study groups, promote teacher experimentation and sharing of ideas and experiences. Administrative support of the program is a key element in implementation. Principals and other supervisors are expected to provide teachers with useful feedback and a supportive environment to risk experimentation and promote collegiality.[3] Figure 2.2 shows RBT's overall program design for the TST program.

TST was introduced to the DoDDS-Germany Region in the summer of 1989. The region then took over management of the program delivery, including selecting pilot schools, creating positions for the regional trainers, and scheduling the courses for administrators and teachers.

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[2]Jon Saphier and Robert Gower, *The Skillful Teacher*, Carlisle, Mass.: Research for Better Teaching, Inc., 1987.

[3]RBT defines *collegiality* as the presence of five behavior patterns: (1) high frequency of teachers talking about teaching in increasingly precise and concrete language; (2) high frequency of teachers observing one another; (3) high frequency of teachers planning, making, and evaluating instructional materials together; (4) teachers teaching each other about teaching; and (5) teachers asking for and willing to provide one another with assistance in resolving teaching problems.

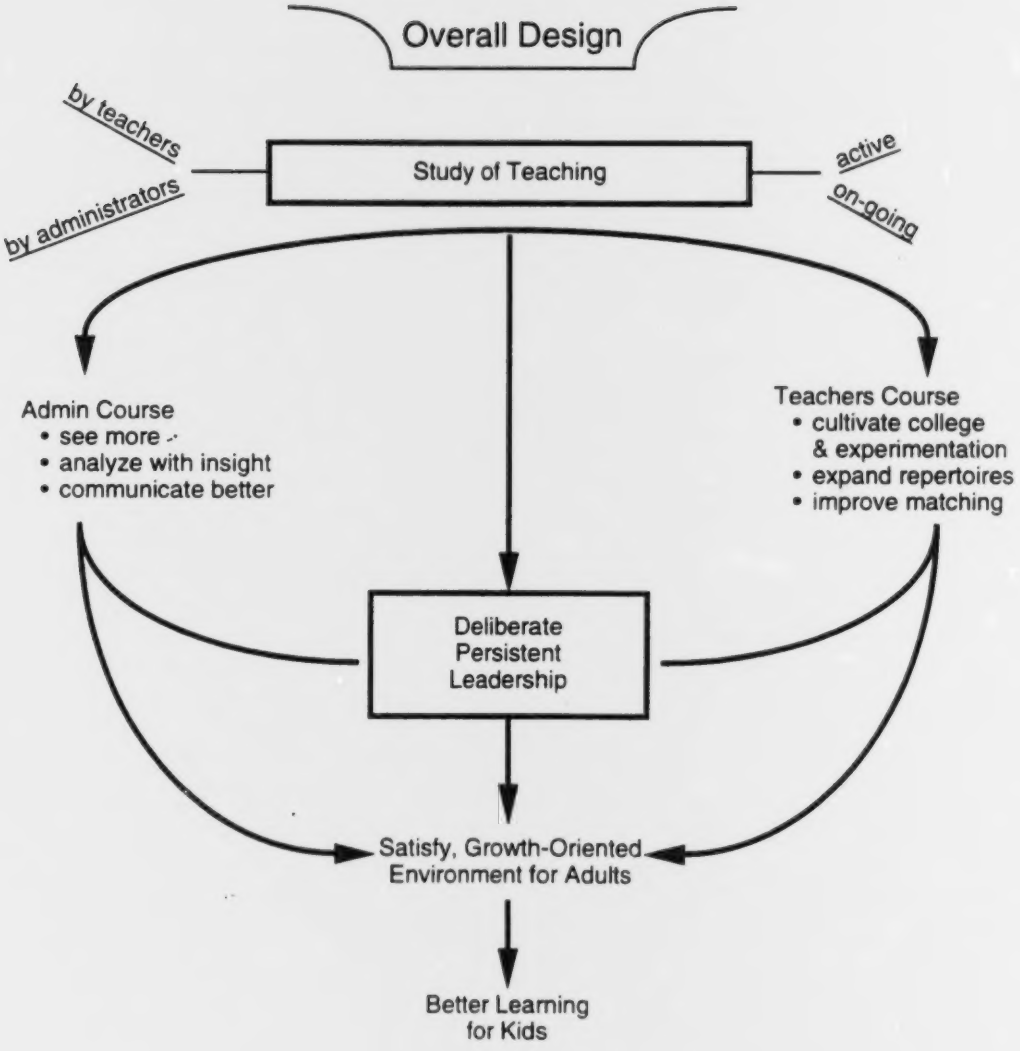

Figure 2.2--RBT Schema of TST Program Design

3. STUDY APPROACH AND DATA COLLECTION

The evaluation of the TST program implementation in DoDDS-Germany uses two kinds of analyses. First, the study evaluates the implementation itself in terms of how well the program design and delivery succeed in achieving DoDDS' goals. Interim results of this part of the evaluation were reported at the end of Year 1 and Year 2 to provide timely feedback for DoDDS administrators as they continued to implement the program. Second, the study analyzes the cumulative changes in the pilot schools in terms of promoting the study of teaching as part of school culture.

SCHOOL SELECTION

Because each region devised its own implementation plan, DoDDS initially wanted RAND to study all five DoDDS regions. However, funding constraints made it more practical to concentrate the effort in Germany, the largest region in the system. At the time of school selection, almost 60 percent of the DoDDS student population lived in Germany. The study analyzed the experiences of 12 schools in the DoDDS-Germany pilot program. DoDDS chose these schools from among the 23 schools in Germany participating in the program. Several criteria were used in the selection. Three pilot schools were chosen from each of the four participating districts. The schools selected represented a range of sizes, grade levels, geographic locations, and staff turnover rates. Thus, although two-thirds of the schools in the study were elementary schools, there were also three high schools and one middle school in the sample. This reflected the age distribution of the DoDDS school population, two-thirds of which were enrolled in elementary grades (K-6) at the time of the study. The sample included large and small schools, as well as those situated in relatively isolated locations as opposed to large cities and more extensive U.S. military installations.

The 12 schools were Mannheim Elementary School, Worms Elementary School, and Karlsruhe High School in the Heidelberg district; Kreuzberg Elementary School, Vogelweh Elementary School, and Kaiserslautern High

School in the Kaiserslautern district; Augsburg Elementary School, Augsburg High School, and Schwäbisch-Gmünd Elementary School in the Munich district; and finally, Böblingen Elementary School, Ludwigsburg Middle School, and Schweinfurt Elementary School in the Stuttgart district. Data were collected from a number of sources. Most of the information was collected during a series of 11 field visits to Germany, including the 12 schools and the regional office, in the springs of 1991, 1992, and 1993.

INTERVIEWS

Most of the field work was spent conducting 880 interviews with regional and school personnel, as summarized in Table 3.1.

At each of the school sites, an effort was made to interview at least one-quarter of the entire school staff. As Table 3.2 documents, this was accomplished in all but one of 35 visits. In seven of the 12

Table 3.1

Summary of Field Interviews

	Number of Interviews		
Positions	1990	1991	1992
Regional			
Director	1	1	1
Chief, Education Branch	1	2	1
Coordinators	5	2	--
Professional Development Library			
Librarian	--	--	1
District Superintendents	4[a]	1	3
Staff Development			
TST Trainers	5	8	11
TST Program Coordinator	--	1	1
12 Pilot Schools			
Administrators	26	23	22
Faculty	253	279	209
Parents	19	--	--
Total	314	317	249

[a]Because the superintendent and assistant superintendent positions were vacant in one of the four pilot districts, the district business manager was interviewed.

Table 3.2

Faculty Interviews at the 12 Pilot Schools

Schools	Percentage of Total Faculty Interviewed			Percentage of Faculty Interviews, Nontrained Teachers			Interviewed Union Representative (Yes/No)		
	1990	1991	1992	1990	1991	1992	1990	1991	1992
Augsburg ES	30	36	37	56	20	11	Y	Y	Y
Augsburg HS	65	75	43	77	30	25	Y	N	Y
Böblingen ES	59	70	46	44	5	0	Y	Y	N
Kaiserslautern HS	28	34	20	60	43	15	Y	Y	N
Karlsruhe HS	61	72	63	56	22	5	Y	Y	Y
Kreuzberg ES	41	65	44	50	5	0	Y	Y	Y
Ludwigsburg MS	43	51	47	60	28	19	Y	Y	N
Mannheim ES	29	27	25	60	27	23	Y	N	N
Schwäbisch Gmünd ES[a]	50	50	--	66	21	--	N	Y	--
Schweinfurt ES	36	36	31	56	16	20	Y	Y	Y
Vogelweh ES	29	38	40	62	39	7	Y	Y	Y
Worms ES	61	65	50	50	41	33	Y	Y	Y

[a]Schwäbisch Gmünd Elementary School closed in June 1990.

schools, interviews were conducted with over 40 percent of the staff in all three years.[1]

Although the categories of respondents remained constant over the three years, the distribution of interviews among the categories changed. Tables 3.1 and 3.2 highlight some of the different emphases each year. In Year 1 of the study, a major goal was to gather baseline data to describe each school at the beginning of the program. The majority of the teacher interviews were with small groups (four to eight) of faculty who had not participated in the TST program. In addition, the baseline view of the school was supplemented by interviews with knowledgeable parents who either served on the School Advisory Committee or chaired the Parent-Teacher Organization (PTO); parents were not interviewed in subsequent years of the study.

[1]Appendix A details the number of teachers and administrators interviewed, by school, for each year of the study.

Because participation in TST was voluntary and teachers in all the schools continued to join the program in all three years of the implementation, nonparticipating faculty continued to be interviewed on an individual basis in Year 2 and Year 3 of the study, but at a declining rate. This, in part, reflected the growing percentage of staff participation in TST during that time. By Year 3, few teachers in the smaller schools of the study had not received training in TST. This practice also reflects a shift in emphasis to interviewing those with experience in the program. The responses of nonparticipants were used to provide an outsider's perspective of the program and its effect on the school. Many of the nontrained teachers in Year 3 of the study had the unique perspective of being new to the school.

Separate interview guides were used for each category of respondent. Interviews for administrators and trained teachers included questions on TST program goals, individual experiences with TST training and subsequent use of that training, and observations on the effects of the program at the school level. Requested interviews with school-level union representatives were conducted as either trained or nontrained interviews but, in both cases, the representative was given an opportunity to voice any union concerns about the program's implementation. After the position of building-based facilitator (BBF) was created in Year 2 of the study, interviews were conducted in each school with all the BBFs concerning each facilitator's experience with this new position and the organization of the study group. Appendix B contains the interview formats for each category of respondent.

QUESTIONNAIRES

A second source of data was a questionnaire filled out at the end of faculty interviews. In Year 1, nonparticipating faculty respondents were asked to complete a checklist of possible teacher interactions as experienced in that particular school. The list was based on J. W. Little's inventory of teacher interactions.[2] Responses to the checklist

[2]See J. W. Little, "Norms of Collegiality and Experimentation: Workplace Conditions for School Success," *American Educational Research Journal*, Vol. 19, No. 3, Fall 1982.

provided a rough indicator of the relative isolation or cooperation among teachers in these schools at the beginning of the program.

In the last two years of the study, both trained and nontrained faculty completed a revised questionnaire at the end of each interview. This survey asked respondents to indicate the range of their experience with various teacher interactions within that specific school. The original list of possible teacher interactions was modified and converted into a series of statements that reflect the five aspects of collegiality, as defined by the TST program. That definition includes the presence of five behavior patterns: (1) high frequency of teachers talking about teaching in increasingly precise and concrete language; (2) high frequency of teachers observing one another; (3) high frequency of teachers planning, making, and evaluating instructional materials together; (4) teachers teaching each other about teaching; and (5) teachers asking for and being willing to provide one another with assistance in resolving teaching problems. Both questionnaires are documented in Appendix C.

OBSERVATION OF PROGRAM EVENTS

A third source of data was RAND staff observation of TST-related activities. Key staff sat in on the TST courses given to non-DoDDS administrators and teachers in July and August 1989 and to DoDDS-Germany teachers and administrators in November 1990 and March 1992. Field teams attended 12 study-group meetings in eight of the pilot schools over the course of the three years. One staff member observed the first training meeting for the Germany Region's BBFs in November 1990 and the last training meeting for the Stuttgart district's BBFs in May 1992. Project members also attended two DoDDS-wide functions, the August 1989 meeting of regional directors and district superintendents, and the January 1990 meeting of the Staff Development Committee.

DOCUMENTATION

Finally, relevant documentation was collected from all levels of DoDDS. Documents included regional memoranda and reports on the implementation of the program, TST regional newsletters, and recommendations of the Staff Development Committee. In addition, field

teams collected a variety of materials from each school. In the first year, as part of the effort to understand the baseline profile of each school, this included copies of the School Improvement Program (SIP) goals; the mission statement; the teachers' handbook and evaluation forms; and when available, the latest North Central Association (NCA) self-study. In subsequent years, field teams collected materials used in the study-group meetings, as well as related school newsletters and memoranda.

ISSUES ADDRESSED IN THE STUDY

The data were used to address a number of issues concerning the implementation, including the following:

- The extent to which the implementation followed the project design
- The extent to which adjustments in policies and practices assisted the implementation of the program design
- The extent to which participants agreed on the goals of the program
- The extent to which participants believed that the project goals were achieved
- The type and extent of change in teacher and administrator behavior as perceived by participants and nonparticipants
- The descriptors of individual school characteristics present in the most effective implementation.

4. IMPLEMENTATION IN THE GERMANY REGION

This section describes the first three years of the program in terms of the environment in which the implementation took place, the adjustments and changes made to the program elements, and the activities initiated at all levels of DoDDS administration to promote the program.

ENVIRONMENT

The introduction of TST to the Germany pilot schools competed for attention with other program initiatives from the district, region, and ODE. The repercussions of world events on the U.S. military and the community support services the Department of Defense provides also had a profound effect on the DoDDS-Germany schools in this study. Finally, frequent changes in building-level personnel, especially administrators, characterized the general environment.

Other DoDDS Programs and Activities

Although TST represented the first time DoDDS introduced a worldwide staff development program, it by no means represented the only activity ODE or the regional office promoted at the time. Other activities at all of the schools required teachers' expenditure of time and effort. In field interviews, the other most frequently mentioned initiatives were the Midlevel Academy, aimed at creating interdisciplinary teams of teachers for sixth-, seventh-, and eighth-grade academies; a systemwide emphasis on math improvement, including the introduction of *Mathematics Their Way* to the kindergarten and first grades; and the introduction of a new curricular approach that teaches spelling through the writing and redrafting process.

Other initiatives and accountability reviews also influenced the environment of the schools in the study. These often required extensive staff participation in committees and report preparation. For example, each school is required to develop and execute an SIP annually. For the schools in this study, the SIP usually had a programmatic or curricular theme targeted at the students, such as improving reading comprehension skills or promoting wellness.

Accountability reviews tended to be particularly stressful because they affected the school's rating. These included occasional reviews of specific programs, such as special education and the routinized self-examination triggered by the requirements of reaccreditation. Over the course of the three years, the NCA subjected a majority of schools in this DoDDS study to accreditation review. Faculties of individual schools undergoing review spent extensive after-school committee time developing a school profile and identifying strengths and weaknesses. In the last year of the study, NCA introduced a new accreditation process spread over a three-year period, during which schools develop outcome-based objectives and a plan to measure and achieve those outcomes. One-third of the schools in this study were in the first group of schools tasked with this new approach.

Persian Gulf War

World events also affected the schools. During the second year of the study, selected U.S. troops stationed in Germany were sent to the Persian Gulf to participate in Operations Desert Shield and Desert Storm. Family members of some students and staff took part in the war, creating an especially stressful situation. Even if no immediate family member was involved, the close-knit military community echoed the turmoil of the war.

Precautions taken to prevent any potential terrorist attacks on U.S. military facilities in Europe also changed the schools' physical environment. Bases and schools that had been fairly open were fenced off, and access was tightly controlled, resulting in delays for staff and students commuting to school. Vehicles were barred from the vicinity of schools to prevent such terrorist tactics as car bombs. And during the war itself, base commanders assigned armed soldiers to patrol school halls.

School staff had to cope with students under stressful situations and try to provide a normal, reassuring environment. The light casualties and short duration of the conflict, as well as the efforts on the part of the school staff to provide support to the students, helped limit the effects of the war on these schools.

Drawdown of U.S. Forces in Europe

A more lasting influence has been the ongoing reduction of U.S. military forces in Europe as a result of the collapse of the Soviet Union. The planned withdrawal of a sizable number of NATO troops, especially the U.S. Army VII Corps from southern Germany, resulted in the removal or reassignment of units at a number of bases housing schools in this study. The DoDDS-Germany Region was facing a decline in student enrollment from 83,000 in September 1991 to 61,000 in September 1992, resulting in a loss of 900 administrator and teacher positions.

The effects of the drawdown were already evident by the end of this study.[1] Two of the four districts in the pilot program disappeared.[2] Of the 12 pilot schools selected for the study, Schwäbisch-Gmünd Elementary School closed in June 1991; Ludwigsburg Middle School closed in June 1992; and the staff at Kreuzberg Elementary School, scheduled to close during the 1992-1993 school year (SY), was cut by over one-third in June 1991. Although the remaining nine schools will continue to exist for the foreseeable future, most also experienced some reduction in the total number of faculty positions.

The specter of the drawdown affected the teachers in this study in ways that were often masked by small changes in the net number of positions in some schools. Temporary local hires were the first to be released. By the end of the study, local hires were being terminated to absorb permanent employees reassigned from closing schools. Even permanent employees had begun implementing strategies to improve their longevity in the region by switching from resource teacher slots back to

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[1]Because of concern that preoccupation with the drawdown would limit the attention school administrators and staff gave to TST, RAND suggested that DoDDS might want to terminate this study at the end of the first year. ODE officials, however, felt that not enough was known at that time about the extent and rapidity of the drawdown in Germany. They placed a premium on continuing to provide and support an atmosphere of normality and quality education despite an uncertain future.

[2]The Stuttgart district was eliminated at the end of SY 1990-1991. The two remaining schools in this study were transferred to the Munich and Würzburg districts. The Munich district was scheduled to be disbanded at the end of SY 1991-1992. Of the four schools in this study from that district one was closed; two were transferred to the Nuremberg district; and one was transferred to the Heidelberg district.

the classroom because the former are very vulnerable to cuts as enrollments in individual schools decline.

As teachers began speculating on the criteria for future reductions in force (RIFs), the rumor spread that those teachers that had taken TST were more likely to get exceptional ratings in annual professional evaluations. It was expected that the RIF would involve a formula based on years of service plus extra years credited due to exceptional ratings.

Turnover

Finally, TST was introduced into an environment characterized by a relatively high turnover among school administrators and staff. During the first two years of the study, it was not unusual for schools to have annual turnover rates of 20 percent or more. In the third year, however, the drawdown had a dampening effect on teacher turnover because the number of positions decreased, and teachers with seniority filled the remaining positions.

The really substantial turnover turned out to be among the administrators. As Table 4.1 illustrates, two-thirds of the principal and education program manager positions changed over the three years of this study. Similarly, one-half of the assistant principal positions also changed at least once. Of the 12 schools in the study, only one had the same administrative staff over the entire three years. None of the changes was directly linked to the drawdown but were due to promotions, reassignments, opportunities to transfer to larger or more attractive schools, and decisions to leave the DoDDS system. High turnover among administrators, then, appears to be a normal circumstance in DoDDS even without the drawdown.

EVOLUTION OF THE PROGRAM IMPLEMENTATION

This subsection examines the activities of DoDDS policymakers promoting and adjusting the implementation of the TST program in DoDDS-Germany over the first three years of the program.

Table 4.1

Changes in School Personnel

Schools	Percentage of SY 1991-92 Staff Present Since 1989-90	Changes in School Administrators SY 1990 and SY 1991-92		
		Principal	Assistant Principal	Education Program Manager
Augsburg ES	71	x	x	--
Augsburg HS	86	x	x	N.A.
Böblingen ES	75	x	N.A.	x
Kaiserslautern HS	72	--	x	x
Karlsruhe HS	67	--	x	N.A.
Kreuzberg ES	80[a]	x	--	N.A.
Ludwigsburg MS	76	x	x(2)	N.A.
Mannheim ES	65	x	--	x
Schwäbisch-Gmünd ES	--[b]	--	x	N.A.
Schweinfurt ES	87	x	--	x
Vogelweh ES	75	--	--	--
Worms ES	62	x	N.A.	N.A.
Total Number of Changes		8	7	4
Percentage of Schools Affected		67	50	33

NOTE: N.A. means not applicable. The position does not exist in that school; x means that at least one turnover occurred in that particular position in that school between SY 1989-1990 and SY 1991-1992; and -- means that there was no turnover in that period.

[a]The percentage would be lower except for the drawdown. In the second year of the study, Kreuzberg Elementary School already had a turnover rate of 25 percent. However, in SY 1991-1992, the staffing positions were cut by about one-third, and teachers were retained on the basis of seniority.

[b]Schwäbisch-Gmünd Elementary School closed in June 1991.

Emphasis on Increasing Access to the Program

The implementation of TST received strong backing from the highest levels of DoDDS; TST became one of the system's five goals for SY 1989-1990. The director of DoDDS made it clear that the implementation of the program was a high priority, and policymakers in ODE and the Germany Region encouraged the expansion of course offerings as rapidly as possible.

The TST implementation in the Germany Region reflected this urgency. It began with the pilot program for 23 schools in four of the region's eight districts, then expanded to all 65 schools in those four districts the following year. Another district was added in the spring of Year 2, and almost the entire region was being served by Year 3. This rapid growth in course availability was reflected in the fact that, three years into the program, nearly 2,500 teachers had taken the TST course, with about 40 percent being trained in Year 3. At that rate, regional officials anticipated that the goal of offering the course to most teachers would be reached in year four. All the school-level administrators had been trained by the end of Year 3.

The accelerated pace of the DoDDS implementation plan, which placed a priority on increasing access to program courses, led to a compression of RBT's approach, introducing the study groups at the end of the first year of the program instead of having to wait until the third or fourth year for a sufficient number of teachers to be trained. As Jon Saphier noted in an August 1989 meeting of all the DoDDS regional directors and district superintendents, "This is exciting; this is the only school system where we are going to improve teacher skills and collegiality and the school culture at the same time."

Development of an In-House Cadre of Trainers

The key to how rapidly the program could be implemented was the number of trainers qualified to present the courses for administrators and teachers. This put an additional strain on RBT, which had contracted to train the regional trainers and now found the number of candidates for certification larger than anticipated. The trainers were recruited from within the DoDDS-Germany Region using an application process open to all teachers and administrators. In three years, the number of regional trainers grew from the initial six to eight and, finally, 13.[3] Although not all trainers were qualified by RBT to present the course (two trainers usually served an apprenticeship as

[3]There were actually more individual trainers than these numbers indicate, since there was some turnover in the position. For example, half of the trainers left the program by the end of the first year. Another two were lost going into the third year.

alternates for one year), the trainers were all assigned duties as points of contact to the various schools in the program.

RBT had an established process for certifying contracting school personnel as trainers; during the first year, RBT expanded those requirements. Originally, RBT required the trainers to take the course from an RBT trainer, then to observe the course and develop a manual for presenting the course themselves, and finally to copresent with an RBT trainer. These requirements were expanded to include videotaped trainer presentations, as well as feedback from course participants. Toward the end of the year, RBT added a requirement for an oral exam before awarding certification.

Because the trainers represented a new position in the DoDDS-Germany regional organization, a number of adjustments were made over the years that tended to solidify the position institutionally. For example, the administration, location, and selection of the trainers changed. Initially, the chief of the region's secondary education branch was given the additional duty of overseeing the implementation of TST. The task of administering the expansion of the TST program in the region was so time consuming that a "TST coordinator" position was added the second year. By Year 2, all the trainers and the coordinator were based at one of two sites and given some office space designated as staff development centers. Secretarial assistance was added in Year 3. The selection process was expanded to include interviews by a panel, which included the trainers, and written applications. All of these changes gave the training cadre a more established role in the region.

In contrast, the fact that trainers were detailed to the position also underscored the ad hoc nature of the implementation. Trainers made no formal commitment to stay a designated number of years on the job, received salaries based on their positions prior to selection, and retained the right to return to those slots upon leaving the program. This policy resulted in some friction because trainers received varying salaries for similar job descriptions. The drawdown introduced further ambivalence about the future of the position. Trainers wondered if it would be wiser to return to their former positions while they still had

options than to remain in a job that was more likely to be eliminated as the withdrawal proceeded.

Adjustments in TST Courses

From the beginning of the program, ODE and the Germany Region established basic guidelines for course attendance. All administrators were required to take the course, but teachers attended on a voluntary basis. Principals were responsible for selecting each school's attendees. Course attendance was during school time, with the region providing reimbursements for transportation costs and hotel accommodations, as well as travel time, if necessary. Stipends were paid to teachers who attended the course during the summer.

Although these general guidelines were maintained throughout the implementation, the region experimented with several ways of scheduling the course. The geographic dispersion of the pilot schools created logistic hurdles to offering courses at locations convenient to all involved. Not until the second year of the program did the region settle on a strategy for dealing with the issue.

Using the pattern set by the course offerings in the summer of 1989, the region continued through the first year to offer pilot schools a limited number of slots for a course located some distance from the school. Travel time was required, and the course was presented in two- to three-day segments over several months. In some instances, the actual time away from school and away from home increased well beyond the time it took to take the course. Moreover, this implementation strategy was very expensive. The distance to the course became the most frequently cited complaint of teachers who had taken the course, as well as the most frequently cited reason by nonparticipants for not joining the program.

In the second year, the logistics burden for the teachers was eased considerably by locating courses near clusters of schools, thereby making it possible for most participants to commute daily to the course. (In contrast, administrators continued to travel to the course.) The greater accessibility of the course was well received even though there

were trade-offs in the experience of "getting away from the school" and attending courses with teachers from outside the district.

From the beginning of the program, there was a tension between the need to expand the program as rapidly as possible and the need to expend manpower on the related TST activities in each individual school. Some aspects of the program design were modified or dropped to concentrate on delivering the course. For example, the RBT design includes an introductory presentation to the faculty of the school so they know what TST is about.[4] Although this presentation should precede the course offerings, it was not scheduled for almost all of the pilot schools in this study until the spring of 1990, almost one year into the program. In another example, as part of the administrators' course, trainers and administrators co-observe classrooms several times in the administrator's school. This part of the course was dropped in the second year because the logistics had become prohibitive.

In the program design, the trainers acted as school-level resources as well as course presenters. However, over a three-year period, regional trainers visited each school less frequently and eventually had little or no direct involvement with the TST activities within the school. In the first year, three regional trainers were assigned to each pilot school. They came to the school several times during the year to co-observe classes with administrators, assist in analysis of notes, and establish study groups. In the second year, only one trainer acted as the contact point for the school, and the trainers made infrequent visits to each school, usually in connection with a study-group program. By the third year, in almost all the schools in this study, the trainer had been there no more than once the entire year. The trainer still acted as a point of contact, but except for contact with the study-group organizers, the communications were long distance.

Finally, RBT accommodated DoDDS by adjusting the contents of the courses in the second year of the pilot program. A ninth day was added to the eight-day administrators' course in order to devote a day to

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[4]RBT uses a three-hour presentation to describe the course to teachers. DoDDS reduced the presentation to one hour to fit it into a faculty meeting.

familiarizing administrators with the aims and process of the peer observation. This was done to increase administrators' understanding and support of teachers' efforts to conduct peer observation in the administrator's school. RBT also dropped the portion of the teachers' course devoted to helping teachers understand how their expectations of students influence achievement. The reason given for removing this module was that DoDDS trainers and officials felt they were getting too many complaints from teachers that the pace of the course was too hurried and the content too much to comprehend. By removing that module, another part of the course dealing with cooperative learning could receive fuller treatment at a more appropriate pace. Subsequently, the expectations module was fielded as a separate two-day module in the third year. Teachers had been asking for more course work to help sustain the participation and interest of those who already had taken the course. Trained teachers could take the module and earn two hours of credit.

Building-Based Facilitators and Study Groups

The implementation also required the creation of a new teacher leadership position and the organization of study groups to support the program at the building level. This provided a school-based program intervention to help teachers trained in TST sustain the program goals. The region authorized the creation of a paid BBF position in each school to help organize the study group and serve as an in-house TST resource for teachers attending the program course. Because this was a new position and a new role for teachers, regional trainers with inputs and training from RBT and ODE created a series of three training sessions for BBFs in the second year and four the following year. In these sessions, trainers modeled study-group meetings and BBFs exchanged experiences.

Office of Dependents Education Activities in the Region

Although the director of DoDDS placed a high priority on the TST initiative, ODE did not become too involved with the actual implementation in Germany until the second year. There was a vacancy in the staff development position in the Education Branch of ODE that could

not be filled during the first year because of a hiring freeze in the Department of Defense. It was not until the spring of 1990 that ODE was able to send a staff developer from the DoDDS-Panama Region to ODE and then take a more active role in the implementation.[5]

In the second year of implementation, ODE began centralizing some aspects of the initiative, such as the contract each region had negotiated with RBT, and to address some of the perceived gaps in the implementation with several ODE initiatives.

For example, ODE helped broaden the staff development background of the regional trainers by sponsoring their attendance at workshops and giving them opportunities to attend professional conferences. ODE also ran sessions for the regional trainers on how to set up study groups and provide training for the BBFs.

A major initiative on the part of ODE was to help administrators practice classroom observations. In a course developed and presented by the ODE staff development coordinator to selected districts in England and Germany, principals were given reviews in selected aspects of TST. Principals also practiced conducting classroom observations with another principal.

Finally, by having a staff developer in the directorate, ODE was able to stress even more the support for the program at the highest levels. Beginning in the second year, principals were made aware of increased ODE monitoring of progress at the school level. A memorandum from the Assistant Director of DoDDS provided principals with guidance on the attributes and duties of the BBF and directed each school to keep ODE informed concerning selection of the BBF and the development of study-group agendas.

ODE emphasized its interest in this evaluation of the program implementation by providing a summary of RAND's interim report the second year and the report itself the third year to the principals in the study. ODE officials made site visits to the schools in the study,

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[5]During the first year, the DoDDS Staff Development Committee took the initiative in addressing some of the implementation issues, especially those related to establishing a new position for regional trainers.

at which time administrators and BBFs were interviewed and teachers were observed. Visits included feedback to school-based administrators concerning observations of teachers' use of the program. For two schools in the study, ODE directed the Germany Region to contract with a consultant to survey each school's climate; this was done in the spring of 1992.

Integration of TST into DoDDS Policies and Practices

Because the top levels of DoDDS initiated the program, the most visible support initially came from the regional headquarters. After three years, policies and activities were in place at the district level that further demonstrated institutional support of the program.

In the second year of the implementation, regional leaders began incorporating evidence of support of TST as part of the annual evaluation of administrators.[6] District superintendents included as elements of principals' evaluations what the principals were doing to promote TST in their schools. In fact, the superintendents themselves were held accountable. As one district superintendent related, "The first thing the regional director asked me when I met with him for my review was, 'what are you doing to support TST?'"[7] Superintendents in all four districts organized activities around the perceived need to offer principals encouragement and support in terms of the program goals. By the third year, almost all had devoted one district-level principals' meeting to the topic or had made principals sharing and/or learning a routine part of the monthly principals' meeting. One superintendent attempted to set up study groups for administrators with

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[6]RAND recommended after the first year of the study that making administrators accountable for TST activities as part of the administrators' performance evaluations would help promote the program.

[7]In a controversial action, one district superintendent included language related to TST as part of the proposed evaluation elements for teachers in the SY 1992-1993. These included two elements in which the teacher demonstrates collegiality and peer observation. The union representative in at least one school had inquiries from teachers about whether the agreement with the union allows such criteria to become part of the evaluation. The union representative felt that some clarification would be needed and that the elements would be withdrawn or reworded.

at least partial success. And another superintendent, who for four years had implemented a districtwide program to improve principals' observation and conferencing skills, continued to provide training in this area that was somewhat complementary to TST.

There was little tie-in between the DoDDS-Germany regional coordinators and TST implementation. An unsuccessful attempt was made to have elementary teachers do at least one homework assignment in the teachers' course using the new math initiative. For the most part, few direct connections were made between the curricular initiatives of the region and TST, although some regional coordinators reported applying TST teaching practices or observation models to their own jobs.

Finally, superintendents incorporated TST into district-level programs. For example, one superintendent included a session on the compatibility between TST and the new NCA process during Educators' Day (a district-level staff development in-service day).

5. EXPERIENCE OF TST PROGRAM PARTICIPANTS

This section addresses how the teachers and administrators in the pilot schools perceived the interventions making up that implementation. The program interventions were generated from both outside and inside the school. Administrators and teachers in small groups left the school to take the TST courses and modules offered by the region and run by the regional trainers. Administrators and teachers returned to the school to try classroom observations, do experiments and peer observations as homework assignments, and join other teachers in collegial study groups. The following account records the participants' reactions to the courses and the initiatives for experimentation and peer observation back in the school. A separate section of the study examines experiences with the study groups.

TST ADMINISTRATORS COURSE AND CLASSROOM OBSERVATIONS

The program implementation required all administrators to take the TST course. The original administrators in the twelve pilot schools were trained by the end of Year 1. Despite the high turnover rate among administrators in these schools, the regionwide emphasis on training all the administrators meant that most of the newly appointed administrators had already attended the TST course. In three instances, nontrained principals were enrolled in the first available course.

Both the administrators' and teachers' courses introduced participants to the concepts and terminology of TST, but the administrators' course also focused on introducing a model for classroom observation. In this model, the administrator conducts pre- and postobservation conferences, takes literal notes[1] during the observation, and writes up the observation to include several elements. The written model is known as CEIJ because it contains [C]laims (statements about a behavior or move the teacher was seen making),

[1]This term refers to the taking of verbatim notes of what is said or done, rather than notes of subjective interpretations of what happened. Thus, these notes provide a specific, nonjudgmental record to facilitate later discussions.

[E]vidence (something from the literal notes that supports the claim), [I]nterpretations (what effect did the behavior have on the students?), and [J]udgments (what does the administrator think about the behavior?).

In the first year of the program, administrators' use of the TST classroom observation techniques was controversial. Some teachers and their union representatives were concerned that administrators would be looking for demonstrations of specific teaching methods known only by teachers trained in the program. Moreover, many teachers were alarmed that trained administrators wrote so much during the observation. These teachers did not understand the literal note-taking aspect of the model. The union asked that the program not be applied to classroom observations until all the teachers had an opportunity to receive the training.

DoDDS responded by stating that TST was not a teacher evaluation program and did not prescribe specific teaching practices. A memo to TST-trained administrators in the Germany Region discussed the intent of the program.[2] It pointed out that the evaluation performance elements and format remained unchanged. The aim of the program was to help administrators become more knowledgeable observers by making them aware of teaching repertoires and to improve communication between administrators and teachers concerning the observation by having literal notes as the basis for the write-up and conferencing. Administrators were urged not to use TST terminology because it might hamper communication with teachers who had not taken the program.

During the second year of the implementation, this controversy almost disappeared. Several factors contributed to this change. First, the above memo was perceived to set equitable guidelines for administrators using the TST model. More importantly, both trained and nontrained teachers developed a better understanding of the observation model and its intent, thereby defusing much of the anxiety associated with the introduction of a new method.

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[2]See Dean C. Wiles, Chief of the Education Branch, Memorandum for The Study of Teaching Administrators, Subject: *Position on the Administrative Application of the Study of Teaching*, January 8, 1990.

In the last two years of the study, both trained and nontrained teachers observed some differences in administrators' classroom observations since the program began. A majority of the teachers noted that administrators had begun taking literal notes during the observation. Other less frequently cited changes were the use of TST vocabulary and an "increased focus on observing the teaching rather than the color of the construction paper used for the bulletin board." Only a few teachers specifically cited the CEIJ method of documenting the observation. In fact, some complained that this new approach was too nonjudgmental. Finally, many complained that they did not get much feedback through post-conferencing. Some teachers were given the literal notes and told to review them for accuracy, but many teachers felt they had gone through only part of the process with no real feedback until much later, in the annual evaluation. On the whole, however, teachers perceived the changes in classroom observations resulting from TST as improvements.

The administrators themselves reported varying degrees of application and comfort with the new observation model. For example, some continued to feel uncomfortable taking literal notes and reported that it was a skill they still had not fully developed.

In addition, administrators perceived that one of the major hindrances to applying the model was simply a lack of time. Most administrators were responsible for evaluating 20 to 30 teachers per year and so made many adaptations. Some administrators used laptop computers to record their observations to streamline the process of producing legible literal notes. Many streamlined the process itself by eliminating parts of the model, such as the conference after the observation.

In the third year, ODE offered the principals of the pilot schools in this study the opportunity to take a short course in classroom observation in an effort to resolve some of the difficulties administrators were having in applying the TST observation model. The course offered some review of selected teaching parameters covered in the TST course and paired principals to conduct practice joint observations back in their own schools. The course also offered

techniques to improve literal note taking and to make the whole classroom observation process less time consuming.

Although the observation course responds to administrators' complaints that the TST model takes too long, some familiar with both courses cited concerns about the compatibility of the two approaches. A basic difference is that TST stresses that the administrator should take the opportunity to observe any or all aspects of teaching, whereas the peer-coaching model used in the ODE course focuses the observer on one or two aspects of teaching--such as the classroom management attributes of attention and clarity--thereby allowing the administrator to limit the time needed for a preconference and to limit the observation time to about 15 minutes.

Administrators who took the course found the review and additional practice very helpful. Not all, however, could relate the various models of observation--TST, ODE module, and, in some instances, a teacher-evaluation model dictated by the district--to each other. And in Year 3, the overwhelming feedback was that administrators had incorporated elements of these models but had not necessarily adopted all the classroom observation elements or viewed the value of the exercise as a process. Thus, many teachers in Year 3 discerned disconnection between classroom observations that involved copious literal notes but feedback that was not always timely or appropriate to the teacher being observed.

TST COURSE FOR TEACHERS

When the region first offered TST courses for teachers in the summer of 1989, there was some confusion among faculty about the purpose and permanence of the program. For example, teachers had heard rumors that their evaluation was going to be based on TST. Most faculties did not receive overviews of the program until nine months into it. This, combined with the fact that there were a limited number of course offerings in Year 1 (about 30 percent of the teachers in the original 23 schools were trained by the end of Year 1), restricted teachers' understanding of the nature of the course and program in Year 1.

Like many program implementations, the growth of the program contributed to changes in how teachers viewed TST. In Year 1, field interviews with both trained and nontrained staff yielded widespread skepticism about the long-term existence of the program. A year later, after a dramatic increase in course availability, the same interviews indicated that teachers now viewed TST as an ongoing program. Teachers who had delayed enrolling in the course in case it was a temporary fad did take advantage of the increased course offerings.

The increased participation also dispelled the negative attitudes of many that those trained in the program were an exclusive group, often somewhat jokingly referred to as the "beautiful people." As the majority of teachers in the pilot schools received training, teachers joined the program so they would not be "left out" from a common experience.

In Year 3, when two-thirds of the teachers had been trained, there was continued skepticism among some teachers attending the course. For the most part, these teachers came from the medium- and small-size schools in which most of the faculty had been trained by the end of Year 2. Many of these Year 3 participants had previously resisted attending the course and some felt pressured, as one of the few remaining nontrained teachers in the school, to participate in the program. A number continued to be negative even after taking the course. They often cited specific course activities as of little value to them. For example, high school teachers in particular would list specific icebreakers or tapes of classrooms used in the course as irrelevant to their job because these activities came from elementary schools.[3]

In contrast to the administrators, teachers enrolled in the teachers' course on a voluntary basis. This proved to be a precondition for teachers gaining satisfaction from the course. In the few instances

[3]This reaction was exactly the opposite of the views expressed by the Year 1 course attendees. First-year course takers reported that the opportunity to take the course with teachers representing different school levels and subject fields was a benefit. They "learned a lot about the demands placed on other teachers," and they found that there was commonality in teaching, that what the course modeled was "not indigenous to one field."

in which principals, who controlled selection of attendees from each school, arbitrarily assigned or strongly suggested course attendance, teachers often carried their resentment against involuntary participation into the course.

Offering TST as a graduate course with four hours of credit (two-thirds the number required for periodic DoDDS recertification) became a good motivator for garnering volunteers. In Year 1, over one in four of the teachers interviewed indicated this was a major reason for taking the course. Similar feedback was gathered in the subsequent years of the study.

Much of the field work in Year 1 focused on the reactions of teachers to the course. The generally positive reaction that first year was evidenced not only in the program descriptions interviewees gave but also by the fact that, when asked why they became involved in the program, over one-fourth of the respondents cited the positive reactions they had heard from other teachers who attended the course.

In Year 1, perceptions of the course varied somewhat by years of teaching experience. Beginning teachers, with experience of five years or less, tended to view the contents of the course in terms of new information or new ways of teaching. Respondents with greater teaching experience were more likely to characterize the program as a review of ways to teach. In fact, one out of three respondents described the course as a refresher or a reacquaintance with various methods. As one teacher said of the course, "It opened doors, some of which I had closed."

When asked to describe the course, virtually all the teachers interviewed the first year referred to at least one of the following activities: (1) building a common vocabulary, (2) reaffirming one's professionalism, (3) promoting collegiality and teachers learning from each other, and (4) expanding repertoires of teachers. At the end of the study, teachers continued to cite these four areas as the legacy of the program for themselves and their schools. Even though most of the respondents interviewed in Year 3 had taken the course over a year earlier, they retained these core perceptions of the program. When asked how TST had affected them personally, one-fifth said it gave them

a professional vocabulary, and one-half responded that they had adopted some of the practices demonstrated in the course. When asked how TST had affected the school as a whole, one-third cited the use of TST vocabulary as a common, professional language, and one-third perceived an increased sharing and openness among the staff.

SCHOOL-BASED TST ACTIVITIES

A major intent of TST was to encourage participants to pursue their role as adult learners by adopting a more open, inquiring approach to teaching. Ideally, the course and home-play assignments promoted a greater tendency on the part of teachers to explore the professional literature and research on their own (referred to as "reaching out to the knowledge base" in the course), to take the risk and try new teaching practices or approaches (experimentation), and to use peer observation techniques.

Reaching out to the Knowledge Base

The rhetoric of TST courses for teachers and administrators stresses that there is an extensive knowledge base for the study of teaching. The course textbook surveys and summarizes research; course handouts include research articles; and the trainers frequently cite researchers and studies. However, there was only limited evidence that teachers trained in TST came away from the course ready to do their own literature searches.

Trained teachers did not gain a good understanding of what was meant in the course by "reaching out to the knowledge base." In Year 2 field interviews, trained teachers were asked to describe what the phrase meant. Very few teachers associated the phrase with education research. The majority of the respondents (at least three out of every four teachers asked the question) believed that "reaching out to the knowledge base" referred to either the knowledge of the teachers in the school ("that we are all resources") or the students in the class (matching the teaching approach to the knowledge base of the class members).

There was some slight indication that the program had precipitated some independent examination of the education research. The DoDDS

Professional Development Library is located in Wiesbaden, Germany. Staff in all the regions can request topical literature searches or specific articles, books, or videos from the library. TST trainers in Germany urged trained teachers and BBFs charged with organizing TST study groups to use this resource.

The head librarian noticed some changes in the nature of teachers' requests after the introduction of TST to the region. Although undocumented, the librarian observed an increase in teachers researching teaching for their own self-improvement rather than for papers required for graduate courses. The requests also became more sophisticated and specific. A review of the logs for telephone requests made during SY 1991-1992 indicated that at least one teacher from ten of the pilot schools in the study had used the services of the library. Although most of the requests bore no relation to TST, a few teachers in these schools pursued such topics as cooperative learning, the Pygmalion effect, problem-solving strategies, motivation, discipline, and peer teaching.

The study groups were a potential vehicle for encouraging teachers "to reach out to the knowledge base." BBFs in half of the schools in the study made at least one request of the Professional Development Library for material on study-group topics. In a few schools teachers noted that the BBF often distributed several journal articles related to the topic of the meeting. Skeptical teachers in one school reacted to the director of DoDDS' call for greater emphasis on assigning homework by using the study group to review the research literature on the effectiveness of homework. The study group spent two meetings reviewing the research, and members in the group changed their opinions on the issue after discovering that homework was an effective tool in student learning given certain conditions.

Despite these examples of teacher-initiated exploration of the research, the predominant pattern apparently was for the teachers to depend on others--the regional trainers or BBFs--to provide the group with the professional literature.

Experimentation

As part of the course for teachers, most participants tried experiments in their own classrooms and submitted short summaries of what they tried to do, how it worked, and what they learned. One purpose of such exercises was to encourage teachers to attempt new techniques from the course and other sources. Field interviews provided some insight as to whether these experiences contributed to continued experimentation.

Almost all the trained teachers reported continued use of some practice demonstrated in the course for teachers. In Year 3 of the study, half of the trained respondents identified the adoption of new practices as the way the program had affected them personally. Over the three years, teachers most frequently cited the use of such individual moves as wait time and dipsticking. They also tried such techniques as medium-size circle, modeling thinking aloud, and visual imagery. The most popular practice explored further was cooperative learning.

Teachers also reported that they felt more empowered to experiment with new techniques. This was based not only on the philosophy that it was all right to risk failure in order to try something new, but on the knowledge that the administrators had been trained in the program also. As one teacher put it, "I can try new things without appearing 'off the wall' to my principal."

Experimentation and sharing of ideas was enhanced at schools having complementary programs, such as the Midlevel Academy, or teachers participating in regional workshops on cooperative learning or the Masters in Teaching program.

Peer Observation

Peer observation is demonstrated in the course for teachers and implemented at the school level as course assignments. Of all the practices modeled in the course, teachers most frequently cited peer observation as something they had not tried before the course and that, as a result of their homework assignments, they would like to continue doing beyond the course.

The results of the Year 2 teacher surveys completed at the end of the field interviews reinforced this conclusion. Figure 5.1 compares the responses of trained and nontrained teachers who were asked to indicate the range of their experiences in observing other teachers at that specific school.[4] The majority of the nontrained teachers had never or rarely observed other teachers, whereas over four-fifths of the trained teachers observed sometimes or often. (The percentage would have been higher except that some trained teachers still taking the course had not yet done their peer observation assignments.) The same pattern was evident in the Year 3 survey.

Although teachers expressed great interest in pursuing this practice, they felt their opportunities were limited. Part of the problem was finding the time to schedule the observations. To do the course assignments, many teachers chose to use their preparation time even though the use of substitutes had been authorized. Some teachers, especially those who had no one else in their field in the school, indicated they would like to have the opportunity to observe other teachers in other schools--a project that would necessitate substitute coverage.

Teachers indicated that the attitude of the principal was important in helping to create more opportunities for peer observations. Some principals discouraged the use of substitutes; others indicated that the disruptions to class time caused by Desert Storm, snow days, and the declining quality of the substitute pool as the drawdown continued made it more difficult to give time for peer observations beyond the course requirements.

More importantly, teachers admitted that the course homework assignments had prodded them to do peer observations. Without that requirement they were much less likely to initiate such activity. Moreover, once teachers had completed the course, they were more likely

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[4]The 1991 questionnaire was filled out by 182 trained and 66 nontrained teachers. The two groups were made up of comparable mixes of classroom and resource teachers. Similar patterns of responses were recorded for the statements: "I invite teachers to observe me teach something I do well," and "I invite other teachers to provide feedback when trying new approaches."

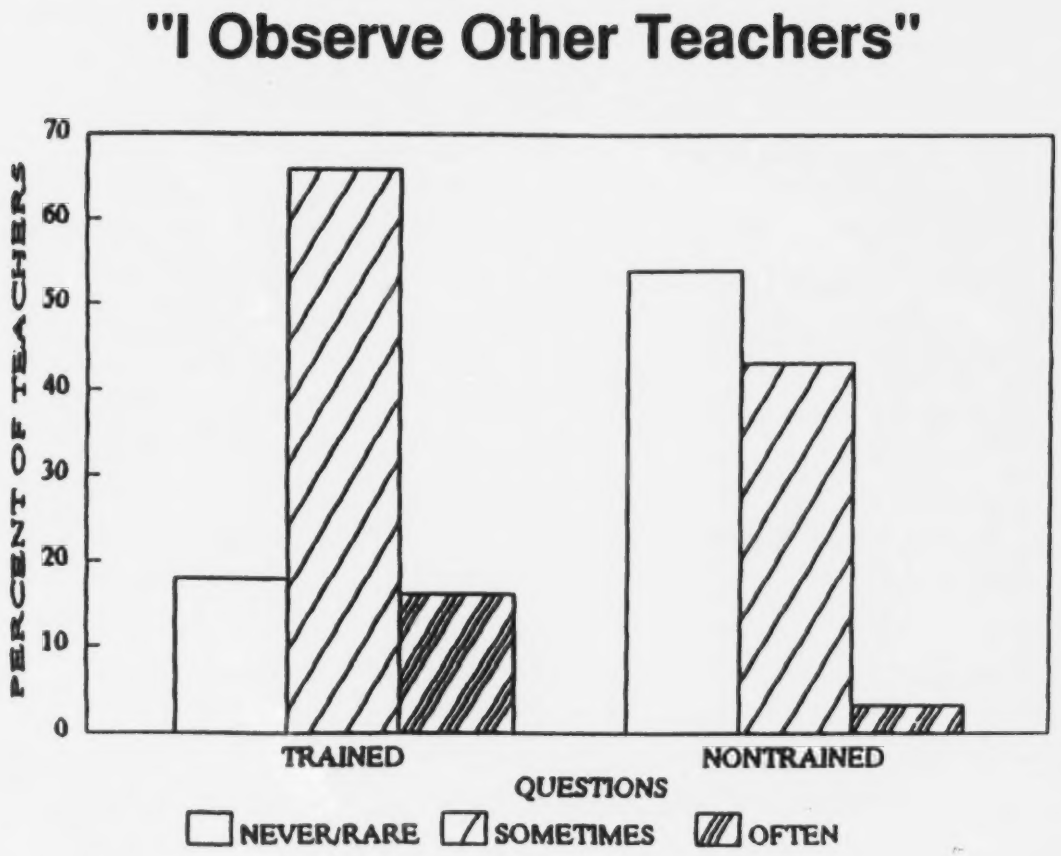

Figure 5.1--Experience of Teachers Observing Other Teachers in the Twelve Pilot Schools

to express interest in observing other teachers considered experts rather than using peer observation as a tool for obtaining neutral feedback concerning their own classroom practices. Without some significant follow-up in this technique, it appeared unlikely that peer observation would continue as an even "sometimes" activity for most teachers trained in the program.

PRINCIPAL'S ACTIONS TOWARD CHANGE IN THE SCHOOL CULTURE

Although one goal of TST is to improve administrators as classroom observers, the overarching purpose of the program is to promote the study of teaching as an ongoing part of school life. In the program design of TST, principals have a key role in promoting that goal by supplying deliberate, persistent leadership. A 1989 description of the DoDDS TST program notes that principals "play a critical role in building the school as a professional learning environment by their modeling and their personal involvement with teachers and teaching."[5] The importance of the principal's role in influencing the culture of the school as both a learning environment for students and as a workplace for adults has been well documented in the research of the last 15 years. The principal's role is viewed as not only pivotal, but increasingly complex, involving what has been described as a "balance between inaction and undue force."[6] For example, principals influence the culture in symbolic ways with the ceremonies, traditions, and rewards they set up. They do it in their day-to-day words and actions, which signal, clearly or with ambiguity, what is a priority and what is not. They also influence the culture by the organizational mechanisms and structures they set up to make the school run. In his review of the research on change, Fullan concluded that the principal's leadership is not the only important source of leadership within the school, but *most changes tend to disappear without the principal's support.*[7]

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[5]Research for Better Teaching, Inc., "The Skillful Teacher Program," photocopied handout, March 21, 1989.

[6]Terrence E. Deal and Kent D. Peterson, *The Principal's Role in Shaping School Culture*, Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, 1990.

[7]Michael G. Fullan, *The Meaning of Educational Change*, New York: Teachers College Press, 1982.

Throughout this study, principals appeared uncertain about how TST related to changing the school culture. While most principals were able to cite effects of the program in their schools, few had specific plans for using TST as a vehicle for changing the culture of their schools. When asked what their program goals were for their own schools, many principals simply cited enrolling most or all of the teachers in the TST course. Most saw the program as an opportunity for teacher development.

One probable reason the administrators focused on the classroom observation and teacher-development aspects of the program, rather than the broader goal of changing the school culture, is that the course for administrators devoted little time to the school culture as a topic of study and then only at the last session, during which collegiality was presented as one of 12 aspects of the school culture. Participants were invited to use a problem-solving technique to address one aspect of the school culture, but the feedback we got from administrators was that this exercise resulted in very modest proposed solutions that often were not actually enacted. For example, one administrator's plan to improve collegiality between administrators and staff was to invite some teachers to dinner at the administrator's home. However, in general, administrators could not articulate how the course had helped them develop strategies to change the school culture in terms of increased collegiality among faculty and administrators.

In the research concerning the principal's role in changing the school, there is a body of literature concerning how principals' work styles and visions of their role in the school influence their behaviors and ability to promote change. In one study of principals involved in implementing specific innovations in their schools, researchers identified three distinct styles of behavior, which they characterized as reactor, manager, and initiator. While all three had some success in implementing change, principals identified as initiators and managers were particularly successful.[8]

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[8]Gene E. Hall, "The Principal's Role in Setting School Climate for School Improvement," AREA Paper, Montreal, Canada, April 1983. A variety of labels have been used to distinguish principals' work styles. See, for example, Arthur Blumberg and William Greenfield, *The Effective Principal: Perspectives on School Leadership*, Boston: Allyn and Bacon,

Similar differences in behavior patterns became evident in this study. In the field interviews, RAND staff asked principals and teachers, both trained and nontrained, what role the administrators played in the program. The sometimes conflicting responses the two groups gave highlighted the influence the principal's leadership style and level of involvement had on the implementation of TST in each school.

Principals' behaviors in support of TST were characterized as either laissez-faire, coercive, cheerleader, or participatory.

Laissez-faire principals had low involvement in the program, concentrating mainly on the housekeeping chores of advertising course slots, enrolling interested teachers in the course, and selecting a BBF. In interviews, both trained and nontrained teachers in these schools generally perceived the administrator's role as attending the administrators' course and signing up teachers for the teachers' course. These principals were characterized by their absence from program activities. They rarely, if ever, attended a study-group meeting, discussed the progress of the program, or attended the regional training sessions with the BBFs. They did not actively seek ways to promote the program. On the other hand, they did not block the program either; they typically let the teachers determine the degree to which TST became a school-based program.

Coercive principals, on the other hand, actively and enthusiastically promoted TST in their schools, but in ways that often adversely affected the program. In contrast to laissez-faire principals, coercive principals tried to achieve teacher participation by casting the program as an expectation or requirement. They pressed teachers to sign up for the course or attend study groups, sometimes linking the latter to a required activity, such as SIP. As a result, the teachers felt little ownership of the program. For example, in one school, teachers described the study groups as meetings at which the principal took attendance. In another, a number of trained teachers indicated that they saw the positive value in the TST program, but they

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Inc., 1980. Principals are labeled as politicians, humanists, brokers, catalysts, jugglers, organizers, rationalists, and helpers.

could not get past their resentment at being forced to participate. At one time, as many as one-fourth of the schools had principals that could be described as coercive, but by the end of the study, none of the principals took actions that fit this label. The change was due to both a turnover of some principals and a modification in the behavior of others.[9]

Cheerleader principals also actively and enthusiastically promoted the program, but they took a more persuasive approach. They became salespersons, taking the opportunity to bring up the program in conversations and meetings or looking for ways to make participation in the program easier. Examples of the latter included designating one day per month to be reserved for study-group meetings, offering comp time for study-group attendance, reducing activities competing with study groups by reducing the number of schoolwide committees on which teachers were expected to serve, encouraging peer observations by offering to arrange for substitutes or occasionally covering a class for a teacher themselves, and dedicating in-service time to the program. Cheerleader principals showed teachers that the program was a priority by keeping in touch with school-based facilitators, attending some of the study-group meetings, welcoming the regional trainers who occasionally visited the school, and giving positive feedback to the teachers about the program. A typical comment by teachers in schools with cheerleader principals was, "The principal really backs the program. He loves it when I use the vocabulary or try one of the techniques."

Finally, **participatory** principals demonstrated the behaviors of a cheerleader but they also sometimes left the sidelines and joined the team on the field. They became active program participants, helping to shape the evolution of TST within the school. They attended study groups on an equal footing with the teachers willing to share what they learned or experimented with in the context of TST. Participatory

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[9]The principals in this study were given interim feedback on the RAND findings, which included the negative effects of coercive actions on the program. Some principals may have changed their actions because of those interim reports on the study. A similar decline in coercive behavior, therefore, cannot be assumed for the principals outside this study.

principals worked with the BBFs and other leaders among the faculty to expand the program into other school forums or try new ways to facilitate the program goals. These principals had a vision of the program that integrated TST into the overall school agenda and goals.

In assessing the progress of the TST in the pilot schools, schools experiencing the greatest difficulties in implementing TST had coercive or laissez-faire principals. Cheerleader and participatory principals were much more effective in promoting the program, and teachers in these schools were more likely to view the interventions as influencing the school. A subsequent section of the report considers the role administrators played in promoting TST as a school-level program.

CONCLUSIONS AND RECOMMENDATIONS

The implementation plan for the administrators and teachers in the 12 pilot schools in this study targeted a large number of participants in a relatively short time. The region was very successful in providing access to training for all the administrators and two-thirds of the teachers by the end of three years. The pilot program taught a number of lessons from the point of view of the participants:

1. **Improved introduction of TST.** Much of the initial confusion and therefore skepticism about the program might have been eliminated if the region had clearly presented the program goals and approach to the administrators and teachers at the beginning of the implementation. The temptation to put all the resources into offering the courses should be resisted, and more time should be devoted to setting up the implementation. This could include faculty meeting overviews by the trainers; regional memoranda or newsletters to both administrators and teachers; district meetings, such as Educators' Day; or other means of communication.
2. **Continuation of school-based activities.** The teachers' course encourages experimentation with new teaching practices and peer observation, but follow-on in these activities appears limited. The introduction of peer observation, in particular, has

provided a significant new technique for teacher improvement, but teachers will not continue to use it unless both strong encouragement and the time to practice the technique are provided. The more this practice is applied to other activities going on in the school, such as the introduction of new curriculum, the more likely teachers will be to adopt it as part of their professional life.

3. **Administrators trained as program promoters.** Administrators not only need to have a clear vision of the purpose and design of the program but also to know how they personally can promote TST as a school-based initiative. Many principals lack the style of leadership or level of commitment to facilitate the local implementation of TST within the school. These administrators need more direction from the TST course concerning the nature of the program and possible roles administrators can play in fostering TST. In addition, the more administrators can access their own study groups, training, or practice activities, such as joint observations, the more likely it is that they will become better facilitators within their school.
4. **Guidance concerning classroom observations.** Even after three years of implementation, some confusion persists concerning the administrators' classroom observations. Feedback from both administrators and teachers indicates that there is a wide variation of observation practices. In addition, the process loses its effectiveness as a staff development tool if administrators delay or fail to conduct a conference with the teacher after the observation. Standardized guidance to all administrators and teachers might promote a more coherent systemwide approach.

6. TST STUDY GROUPS

A key component in the program design for promoting continued professional learning and collegiality as part of the school culture is the study group. RBT defines the study group as a "volunteer group of teachers who meet regularly to study teaching together."[1] It is designed as a follow-up to the teachers' course, providing a vehicle for reviewing and extending the course content, as well as for extending its availability to nontrained faculty. The aim is to become "a way to institutionalize the study of teaching itself as a regularly recurring activity in the lives of teachers at their work site, but in such a way that they (the group's members) control and lead it."[2]

Study groups are one of several organizational mechanisms increasingly used to provide school faculties opportunities to learn as follow-up training sessions or as self-generated collegial learning opportunities. Like peer coaching, study groups are based on the assumption that collaborative or collegial interactions in a heretofore isolated profession can benefit such efforts as organizational development, school improvement, or restructuring.[3] The research literature shows that such collegial opportunities should be not only purposeful but an ongoing, embedded part of the workplace life because successful change takes place on a continuum; people are not instantly

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[1]Research for Better Teaching, Inc., "Study Groups in TST Program," photocopied handout, July 15, 1990.

[2]Ibid.

[3]See Claryce Evans, "Support for Teachers Studying Their Own Work," *Educational Leadership*, March 1991; Joellen P. Killion and Guy R. Todnem, "A Process for Personal Theory Building," *Educational Leadership*, March 1991; A. B. Colton et al., "Collaborative Inquiry into Developing Reflective Pedagogical Thinking," *Action in Teacher Education*, Fall 1989; Paul W. Johnson, "Teacher-Conducted Brown Bag Lunch Seminars: One Solution to Staff Development in Isolated Schools," *Journal of Staff Development*, Spring 1989; Ann Lieberman, "Collaborative Work," *Educational Leadership*, February 1986; Maureen A. Sullivan, "Staff Development Through Professional Reading and Discussion," *Journal of Staff Development*, Spring 1987; and Judith Warren Little, "Teachers as Teacher Advisors: The Delicacy of Collegial Leadership," *Educational Leadership*, November, 1985.

transformed but rather become committed as a result of their involvement and experience with the results of an innovative approach.[4]

Joyce and Murphy documented the experiences with the creation and early implementation of study groups as part of a districtwide restructuring effort. They describe the process as one that, while it may not involve complex behaviors, is difficult, fragile, dependent on human relations among learners, and needing focus if it is to be meaningful and sustained.[5]

These aspects of the process have been evident in the development of study groups at the schools studied, all of which had never organized study groups prior to TST. From the first year of the pilot program to the spring of 1992, the study groups evolved from meetings of trained teachers with the assistance of a regional trainer to relatively self-sufficient groups open to all teachers and organized by a BBF. The establishment of study groups was a new intervention for the DoDDS-Germany Region and, after three years of implementation, these groups had embraced a variety of forms and purposes.

Based on data gathered on the experience of the 12 pilot schools with the study groups,[6] this section describes the role of the BBF;

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[4]See M. Huberman and D. Crandall as cited in Michael Fullan, "Change Processes and Strategies at the Local Level," *Elementary School Journal*, Vol. 85, No. 3, 1985; Thomas Guskey, "Staff Development and the Process of Teacher Change," *Educational Researcher*, May 1986; and Shirley Hord et al., *Taking Charge of Change*, Alexandria, Va.: Association of Supervision and Curriculum Development, 1987.

[5]Bruce Joyce and Carlene Murphy, "Epilogue: The Curious Complexities of Cultural Change," in *Changing School Culture Through Staff Development*, Alexandria, Va.: Association for Supervision and Curriculum Development, 1990.

[6]Information on the study groups was collected from a number of different sources. Experiences with the study group were garnered in the interviews with teachers, administrators, and regional trainers in each of the three years of the study. All the BBFs were interviewed in Years 2 and 3 concerning the organization, content, successes and failures, and future of the study groups. Interviewers also asked to see any materials used in conjunction with study-group meetings. Field teams observed a total of 12 study-group meetings held in eight of the schools over the course of the study (one in SY 1989-1990; five in SY 1990-1991; and six, including one on videotape, in SY 1991-1992). The study group in one school was observed in each of the three years, and study groups in two schools were observed in both 1991 and 1992.

outlines the general history of the groups over the first three years; profiles the third-year study groups in terms of the effects the format, content, and structure adopted by individual schools have on the effectiveness of the group; and suggests some of the perceived benefits, future difficulties, and possible alternative organizations to better promote the program goals.

BUILDING-BASED FACILITATOR

The BBF position was created in Year 2 of the program to help develop teacher leadership and involvement in TST at the school level. The major impetus for creating the job was the need to have a study-group leader in each school. In the RBT model, the study group goes through an evolution from a directive leadership in the beginning to a more participatory leadership as the group matures and the leader orchestrates the running of specific sessions among the participants.[7] In Year 1, the regional trainers acted as the study-group leaders; in Year 2, the regional office established the paid position of BBF for each pilot school so that a member of the faculty would assume the leadership of the group. In Year 3, every school in the region had a BBF.

Job Description

Although organization of the study-group meetings was the major requirement of the job, the BBF also fulfilled other functions, i.e., supporting and promoting other TST activities in the school, acting as a point of contact between teachers and the regional trainer, and maintaining awareness of TST in the school through the creation and dissemination of information.

To accomplish these goals, BBFs described a number of tasks associated with their jobs. For example, they collected teachers' homework assignments for the regional trainers, who in turn returned homework assignments and distributed regional TST newsletters or course

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Finally, one staff member attended two training sessions the regional trainers held for the BBFs, one in November 1990 and one in May 1992.

[7]See the section entitled "Directive vs. Participatory Leadership in Study Groups" in "Study Groups in TST Program," op. cit.

graduation certificates to the teachers through the BBF. Many BBFs assisted in scheduling peer observations, in some cases acting as substitute teachers to free teachers to observe in other classrooms. Still others reported that they helped course participants having trouble formulating experiments or confused about some aspect of the course.

In a few instances, BBFs devised unique ways to promote the program. For example, one BBF made TST presentations at department meetings in Year 1; another contacted teachers new to the school to introduce TST and the related format for administrators' classroom observations. Administrators in the latter school noted that not only did the actions of the BBF ease the new teachers' transition into the school but also brought new people into the program.

Selection and Turnover

Although the position was established by the regional office, the principal selected the BBF, who received a stipend of $900 and signed a contract with the principal similar to that of teachers serving as extracurricular coaches and club advisers. In most cases, the BBF volunteered for the job; in some, the principal actively recruited for the position. At one-third of the schools in this study, two teachers shared the BBF position.

Most of the original BBFs continued in that position during Year 3, but there was some turnover because of teachers leaving the school. Of the 12 schools in this study, six had BBFs new to the job in Year 3; for the most part, continuity was maintained because the BBF replaced one of a team of two teachers holding the position in three instances. As a result, the BBFs generally expressed greater ease with the job in Year 3 because most were able to build on the experiences of the previous year.

Although both individuals and teams have filled the BBF position successfully, the problem of high turnover highlights the advantages of having two teachers share the position. First, it provides continuity when one facilitator transfers out of the school. In three of the pilot schools in this study, the midyear departure of the lone BBF virtually became the death knell for further study-group meetings that year.

Second, having two facilitators ameliorates any friction caused by an individual's leadership style. Regional officials worried that one problem with establishing this position was the risk of having the program, for better or worse, identified with one individual. A two-person approach helps counter this perception, as would changing one of the partners each year. Third, because this is new territory for many teachers, having two people fill the position provides a built-in source of mutual support. Finally, drawing each teacher in the team from different factions within the school prevents the program from being identified with a particular segment of the faculty. For example, one BBF teaches in the lower grades and the other in the higher grades in a school where the separation between the grade levels is heightened by being located in different buildings. Having a BBF from each building bridges the gap and attracts participants from both factions.

Training

Because this was a new position, the regional trainers ran three one-day training sessions for all the BBFs in the pilot schools the first year the job was created and four sessions for all the BBFs in each district the second year. Trainers modeled study-group sessions for the group and made BBFs cognizant of available resources for study-group meetings, such as professional videotapes or possible guest presenters in the immediate area.

BBFs stated that the most helpful aspect of these sessions was often the opportunity to share experiences with other BBFs. When the training format changed from all the pilot schools to just the district level, many BBFs reported that this smaller, geographically closer group fostered greater collegiality among members. Although BBFs rarely networked outside the training sessions, many felt very comfortable raising their specific concerns at these meetings.

The effectiveness of these teachers as facilitators varied, as did the individual school situations and the personalities involved. The most successful facilitators combined organizational skills with enthusiasm for the program and a position of respect vis-à-vis their peers. Less successful BBFs were in situations in which they lacked

administrators' support, were perceived as too cliquish, or did not themselves place a high priority on the program.

HISTORY OF THE STUDY GROUPS

Study groups were formed in Year 1 of the program as an adjunct to the teachers' course. Regional trainers held at least two after-school meetings at each pilot school so that teachers could share the experiments done as homework assignments for the course. Although teachers were told that the study groups would continue as a school-based TST activity and be organized by a member of the staff, teachers were unclear at the end of Year 1 about the membership, organization, and purpose of the groups. The trainers, having concentrated on presenting and following up on the courses, felt unprepared for the role of study-group facilitator. The end of Year 1 left many questions as to how this new mechanism in support of TST would evolve.

Year 2 of the program emphasized the transition of the study group from a region-run activity to a school-run activity. Several actions at the end of Year 1 supported this change. First, RBT provided some training and disseminated a detailed description of the study groups to the regional trainers and schools. And second, at the instigation of ODE, the region created the BBF, thereby providing an advocate and organizer of the study group within each school.

In Year 2, the study groups became more the product of school staff, but they still maintained a strong dependence on the regional trainers for program ideas and presentations. BBFs were expected to hold a minimum of four meetings during the year. The majority of schools in this study had at least six meetings. However, in one-third of the schools, the study group was floundering, and the BBF had difficulty organizing even the minimal number of meetings.

The most controversial issue in Year 2 concerned the nature of study-group participation. After publishing conflicting guidance on the issue, the region made it clear through the TST newsletter that attendance was voluntary, a position RBT advocated. In one-fourth of the schools in this study, the principal tried various approaches to require teachers' attendance; the result in each instance was resentment

on the part of the teachers, expressed through low attendance and little support for the group. Teachers often commented that they had "signed up for a course not a lifetime commitment." In these schools, it took until Year 3 for the groups to recover their momentum; even then, one school was never able to establish a functioning study group. Year 2 also marked the opening of the groups to nontrained teachers; however, few teachers who had not taken the course joined the groups.

A related issue concerned the attendance and role of administrators in the group. The RBT guidance made it clear that administrators play a positive role when they join a study group as an equal participant and not just a someone who sits in for a while and then leaves. Again, in Year 2 of the study, one-third of the principals demonstrated two extreme roles that hindered the progress of the group. They either sat in on the group in their administrative capacity (sometimes openly taking attendance) or never came to a meeting, thereby signaling the low priority of the study group in that school. By Year 3, the administrators in this study had pretty much abandoned the former behavior, much to the benefit of promoting teachers' participation at meetings.

A third issue concerning the purpose and subject matter of the study groups remained unresolved throughout this study. The RBT description of the study groups clearly stated that the purpose was to study teaching, not other topics pertaining to the school, such as new curricula, changes in the organization or structure of the school, or other issues not directly organized around studying teaching practices. In Year 2, regional guidance restricted study groups to examining aspects of teaching already covered by the teachers' course; in few schools did all the study-group meetings meet this guideline. In Year 3, the guidance was expanded to permit study of any aspect of teaching contained in the TST framework, even parameters of teaching not covered in the course. Again, most schools did not adhere completely to this guidance.

By Year 3, the study groups in the pilot schools had become fairly self-sufficient. Most schools no longer relied on the regional trainers to make any of the presentations, although some enlisted experts from

outside the school for a few programs. For the most part, the study-group members participated in determining the topics and scheduling the meetings, which were held on a much more routine basis. Most BBFs expected to hold the 11 meetings required by the region; in contrast to Year 2, only two schools had floundering study groups.

YEAR 3 STUDY-GROUP PROFILES

If most of the pilot schools had an established study group, the role this vehicle played remained uncertain. A closer examination of how the groups functioned in Year 3 provides insights into the various adjustments made to the original concept at specific sites. It also helps explain the ways the study groups do and do not support the goals of the program.

Table 6.1 contrasts RBT's ideal description of the study group with the real-world experience of the 11 study groups in Year 3 of the implementation. The table indicates that, generally, the study groups conformed to the format of the RBT model with the important exception that the meetings were somewhat shorter than recommended. Also, in many of the schools, the group meetings were not routine events in the school calendar. Only about one-third had established a specific meeting time, such as the third Wednesday of every month. Two schools scheduled meetings that hovered around a general time, such as the first week in the month. Almost half still varied the dates, an indication that the group had not yet become integrated into the school life.

Interestingly, all the schools scheduled the meetings after school. There was little or no experimentation with other time slots during the day--such as before school or in the evening. One school did try holding study groups over evening potluck dinners but only two or three teachers attended. Other teachers complained that they had to prepare dinners for their families; that they did not live in the immediate community, so it was inconvenient to stay late; and that they had scheduled social engagements.

The issue of holding study groups outside school hours is occasionally raised by union representatives. While there seems to be a general acceptance of the current policy, at least one principal tried

Table 6.1

Profile of Year 3 Study Groups

	RBT Model	Schools' Experience	Number of Schools
Format			
Frequency	8 to 12 sessions	8 to 12 sessions	8
		Less than 8 sessions	3
Schedule	Dedicated time	Routine meeting time	4
		Usual meeting time	2
		No set date	5
Length	75 to 90 minutes	75 to 90 minutes	2
		60 minutes	9
Size	3 to 15 attendees	3 to 15 attendees	10
		15+ attendees	1
Presenters			
	Group members	BBF	1
		Teachers	8
		Guest speakers	2
Content			
	Teaching only	Teaching	3
		Teaching/curricular	4
		Teaching/curricular/ other	4
Structure			
	Share experiments/new information	In-service	5
		Group discussion	1
		Fragmented agenda	5

to make attendance after school more attractive by offering comp time; i.e., teachers could leave right after school on another day to make up some of the time. Most teachers said they "never had the time" to take advantage of the offer but they appreciated the principal's recognition of their extra effort.

In contrast to Year 2, when the BBFs or guest speakers made the presentations of new material, most study groups relied on teachers within the school to fulfill this function. This indicated progress toward the RBT model of participatory leadership. However, school staff invited to make presentations were not always participating members of the group. The enlistment of outsiders with expertise or knowledge often served to enhance attendance at that particular meeting. As the table indicates, two schools continued to place a heavy reliance on

speakers or presenters from outside the school. These groups also used the teachers within the school, but the drawing card, according to the field interviews, continued to be the guest speakers.

Striking differences emerge in comparing the content of the meetings. The program is called "the study of teaching," and that is the proposed purpose of the group. There are many common issues of interest that also pertain to working in a particular school and that also could sustain support groups,[8] but the TST study groups exist to review and extend the staff development program by making the members continuous learners and explorers of teaching practices. DoDDS guidance to the BBFs echoed this focus by indicating that the topics should come from the teachers' course or other parameters of teaching identified in the course. Only about one-quarter of the study groups maintained this focus throughout the whole year.

Most of the groups used at least some of the meetings as an opportunity to address curricular topics. This was particularly true of the elementary schools, probably because each teacher taught most subjects. Most of the elementary schools scheduled at least one meeting on the new math and spelling programs introduced the second and third years of the implementation. Teachers in these schools often cited those particular sessions as the most useful study-group meetings because they were able to exchange specific ideas about how to implement something new and uncertain in the classroom. Or, as one teacher described the meeting, "It verified that I'm not the only one having problems with this new curriculum." Teachers seemed to feel more comfortable with these topics because it was easy to relate to what they did in the classroom and because it put the focus more on what one taught rather than how one taught.

In one-third of the schools, the study group occasionally became a vehicle for addressing other concerns, ranging from familiarizing teachers with the computer to orienting new teachers. In some instances the pressures of the outside environment, especially the drawdown, were

[8]At one of the schools in this study, the formation of a TST study group stimulated the formation of two other study groups focused on a new math program and exploring ways to use literature in the curriculum.

evident. In a school scheduled to close, the group held sessions on ways to relieve stress and preparation of resumes. A BBF in another school told of a meeting in which "everyone came in so upset that we dropped the planned agenda and spent the time talking about how to deal with the tension."

Finally, the profile of the study groups characterizes the differences in the structure between sites. The groups are supposed to cover two objectives: (1) share experiments and (2) introduce and discuss a new idea or technique. In the RBT model, the sharing of experiments is the most important and is allotted as much or more time than the introduction of a new idea. Based on the accounts of BBFs and attendees, as well as field observations of meetings, it appears that all the groups devoted at least some time to sharing experiments but often in a superficial manner; that is, teachers listed what they tried, or a few demonstrated what they tried, but no discussion followed, except the teacher's exclamation that "The students loved it," or "It really worked!" One BBF identified this as the least successful part of the agenda unless she made prearrangements with a couple of teachers to share an experiment at the meeting.

All the groups placed the greatest emphasis on presenting new information or demonstrating a technique; this part of the program received the largest time allocation. Using observations and descriptions of meetings, study groups were characterized as following three general formats: in-service, group discussion, and fragmented agenda. Groups using the in-service format devoted at least three-quarters of the hour to a presentation including questions or discussions at the end. These tended to be in the mode of a speaker and an audience, and teachers often described these study groups as "like an in-service only on our own time." The presentation could be made on a topic by a staff member with acknowledged expertise (often a resource teacher), or the study group could serve as a forum for an attendee to share experiences from regional or district-level conferences and training with the group members. As one teacher described this type of study group in her school, "it gives us an opportunity to compare workshops."

One school followed a discussion-group format. The BBF gave a brief introduction to the topic, and the members then began discussing the topic among themselves without even the need for a moderator. As the discussion deepened, teachers not only drew on their own experiences and knowledge of teaching but also questioned and raised issues. The group had the advantage of being small and focused, and participants were willing to stay at least 90 minutes to dig below the surface of an issue. The teachers who did attend described the study groups as the "best part of the program" because it allowed them to "focus on one specific aspect and discuss it in real life terms."

Finally, many of the study groups followed a fragmented structure; i.e., they divided the hour-long session into at least three or more separate segments. Much of this incorporated the training provided the BBFs, which modeled groups using community builders, time for sharing, and time for a new idea. This allowed members to cover several different areas in almost a miniversion of the approach used in the course. The observed drawback was that the time allotted became so constricted that it often trivialized the information being shared. For example, one study-group meeting had an agenda that began with a community builder, proceeded to sharing of expectations about the meeting, then sharing experiments, then new information, then closure of content by having everyone provide a one-word summary, and finally a segment for looking ahead. Participants were clearly stimulated by the new information presented through excerpts from a professional video and had already begun to share experiences and raise questions within the group sitting at each table, but any discussion was immediately cut off by the necessity to move on to the next segment and stay within the one-hour time frame.

Not only can the segmented approach undermine looking at a particular topic in any depth, it can also result in a hopscotch approach to a variety of presentations with no common theme. One study-group meeting featured three teachers allotted ten minutes each on a TST topic or technique. The first gave an example of a visual imagery experiment tried in a history class; the next teacher talked about attending the TST Expectations module and passed out a few handouts from

the course; and the third presented a skit on the different clarity moves. At no time were comments or discussion encouraged.

These examples focus on the extremes this approach can foster. Most study-group sessions had only one theme for new information, and a few study groups scheduled more than one session on certain topics, such as expectations, so the group could study it in more depth. BBFs were not all ruthless in cutting off discussion and had been known to adjust their agendas to accommodate spontaneous interest in a topic. However, teachers who attended these study groups were more likely to talk about making minipresentations or sharing tidbits and handouts. Study-group meetings that became too fragmented ended up fitting the description one teacher gave of the study group in her school, "It's some information, handouts and munchies but I would not want to go more than once per quarter."

One final indication of the status of study groups in Year 3 was the support the groups received in terms of staff participation. Table 6.2 indicates what proportion of the entire staff and trained teachers usually attended any given study-group meeting. The average attendance at most study-group sessions was less than one-fifth of the school staff; however, in the majority of study groups, that participation represented more than one-quarter of the trained teachers in the school.

Table 6.2

Study-Group Attendance in Year 3

	Average Attendance	
Attending a Study-Group Meeting (%)	Total Staff[a]	TST-Trained Staff[b]
Less than 15	3	--
15 to 19	4	1
20 to 24	1	2
25 to 29	--	2
30 to 39	2	4
40 or more	1	2

[a]Number of schools, based on total staff.
[b]Number of schools, based on TST-trained staff.

These percentages underestimate the total staff participation, defined as all teachers who attended at least one study-group meeting during the year. The BBFs reported that their groups had a core constituency of faithful participants, but others came to the meetings sporadically depending on topic, speaker, or location. This was confirmed by the trained teachers, who most frequently indicated that they had attended only two or three meetings because of interest in the subject matter or presenter and a conveniently scheduled meeting time.

FUTURE OF THE STUDY GROUPS

During the three years of the implementation, the study groups changed greatly in terms of the leadership and nature of the meetings. Experiences and success in terms of attendance and frequency of meetings varied, but the majority in these pilot schools had established self-sufficient, functioning groups.

In looking toward the future of the study groups, an important predictor is the nature of the support for the group. Teachers who attend the study groups consistently give two reasons for their support. First, they perceive that the meetings provide an opportunity to meet with teachers from other grades and locations, i.e., staff with whom there is little contact. Second, participating teachers view the study groups as the major vehicle for keeping TST visible within the school. Given these responses, it is not surprising that, when queried about the future of TST in their particular school, 40 percent of all the teachers interviewed linked the future of the program to the future of the study groups.

If the study groups play the key role in the future existence of TST and the program goals of influencing the school as a workplace, the current status of the study groups needs to be reexamined with a view to making them durable and effective program vehicles for the future. Based on the experience of the past three years, the following aspects of the groups should be reviewed.

Leadership

The BBF position, or something similar, is crucial to the continuance of the study groups. Experience has shown that study groups

simply disappear if the BBF transfers from the school. By designating the BBF as a shared position for two teachers, many of the pitfalls associated with dependence on a single facilitator can be avoided.

The BBF position represents a new role within the school. For BBFs and the other study-group members, the nature of that position is still developing. As the groups have become more self-sufficient, BBFs have had to reexamine their role, particularly in adopting more participatory rather than directive styles of leadership. To help in this transition, BBFs need more training as facilitators and in team building.

Principals and other administrators are still adjusting to their participatory role in the study groups. Although administrators in this study abandoned the coercive tactics that undermined teachers' support of the group, administrators throughout the region need some guidelines on their role in the study group. Principals interact with the groups in several ways. First, they choose the BBF, so they need some understanding of the qualifications for the job. Second, all administrators help by demonstrating support for the study group. This includes making the study-group meetings a priority in the school calendar, publicly recognizing the contributions of the group, and facilitating the mechanics of holding the meetings (publicity in the daily bulletin, office support, etc.). Finally, the administrators have the option of joining the study group as a participant. Just as the BBFs receive training, administrators should hold their own district meetings to review their role in the study groups and to compare experiences and ways of promoting the study group in their school.

Scheduling

Scheduling conflicts are one of the major hurdles to teachers finding time to participate regularly in study groups. Some of the study groups in the pilot program have already tried to stake out a given day each month for their meetings. In some instances, they have selected the day of the week reserved for administrative meetings because competing activities are less likely to be scheduled then. A few principals have fenced off a specific time on the monthly calendar for the meeting. Establishing a routinized, protected schedule of

meetings will allow greater participation in the study groups and help them become a more integral part of the school as a workplace.

Schools that have two BBFs could have more flexibility to explore alternative scheduling of meetings. For example, one could run a breakfast study group, and the other could run the same program at an after-school meeting, thereby giving teachers more options for attendance. The same approach could be used to offer the study group during two different lunch periods.

Content and Structure

The key to the survival of the study groups is the content and structure of the meetings because, more than any other aspect of the group, these determine whether the teachers perceive the activity as having a meaningful purpose and substance. If the study group is to be a long-term activity that becomes part of the school culture, teachers must find it a worthwhile use of time.

As currently constructed, study groups will have difficulty surviving over the long term. Teachers in groups that use an in-service structure note that there is a saturation level to this approach; there are only so many workshops to share. Teachers in groups with fragmented agendas are unlikely to make long-term commitments if the only reward is to gather some tidbits. And attendance is bound to fluctuate if the topic of the meetings bounces around from week to week covering various teaching, curricular, and other issues.

The current study groups have also failed to support key TST activities. For the most part, the sharing of experiments constitutes a small portion of the meetings, and the groups have not served as a vehicle to promote peer observations or related activities. The groups have not provided the prod that teachers say they need to continue practicing such activities.

The content and structure should be reexamined and changed to realign the groups toward the goals of TST. Some examples of alternative structures and formats follow:

- A simple change would be to encourage groups to spend several meetings addressing a single topic or method. This would provide more coherence and depth in examining a specific aspect of teaching and enable the group to organize a variety of activities around a single theme. For example, the group might take one session to distill the research, the next to have teachers in the group model the relevant teaching practices, and a third for teachers to compare experiments they tried in the classroom applying the research.
- Another approach might be similar to that of a law school study group. At the beginning of the year, each teacher or group of several teachers agrees to specialize in one aspect of teaching. Each would be responsible for gathering the relevant research and facilitating one or more meetings either to summarize the material for discussion or to use a jigsaw approach so that the teachers themselves could go over a few key journal articles and identify the key findings. The example given previously of the study group that devoted two sessions to reviewing the research literature on the effectiveness of assigning homework begins to approach this model.
- Another alternative could be to use the study groups as the vehicle for covering new modules or reviewing old modules on the teaching parameters. As an example, the study group could take a whole semester to cover the content in the two-day Expectations module. Teachers would be offered credit toward recertification if they attended all the sessions and did a number of homework assignments consisting of experiments and peer observations. This approach rewards teachers for their participation and provides the prod teachers say they need to continue doing peer observations and experiments.
- Finally, the study-group focus could be determined by the faculty as part of an overall school action or improvement plan. This would broaden the base of support for the study

group and more directly tie the topic of study to the perceived needs of the school.

These are just some examples of ways the existing study groups could be modified to promote TST more effectively. Whatever changes are made, the study groups need to be retooled to provide a more focused and purposeful mission in sustaining TST into the future.

7. THE PROMOTION OF COLLEGIALITY

Of the three program goals, DoDDS-ODE considered improving the school culture by promoting collegiality among teachers and administrators to be the most important objective. In the design of the program, the two more individualized goals of improving the classroom observation skills of the administrators and developing teachers professionally ultimately contribute toward strengthening the school culture. This section examines whether the implementation of TST over a three-year period influenced changes in the cultures of the 12 pilot schools in this study.

The program definition of collegiality is derived from the work of Little and Rosenholtz and incorporates specific dimensions.[1] School norms promote collegiality if teachers demonstrate a high frequency of various interactions including talking about teaching, developing and sharing teaching materials, observing one another, teaching one another techniques, and giving assistance. In a collegial school, there should be evidence of such interactions, i.e., open doors while classes are in session, teachers in each other's classrooms as coaches and observers, sharing information and collaborating across grades and curricula, discussions of teaching in the faculty lounge, and continued support of professional learning through study groups or other mechanisms.

The program goal of promoting collegiality as part of the school culture is a difficult one.[2] The most likely norm is that teachers function in relative autonomy and isolation with few institutionalized interactions beyond the department-and-grade-level structure of the school and the sporadic need to form cooperative ventures, such as science fairs or accreditation reviews.

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[1]See Judith Warren Little, "Norms of Collegiality and Experimentation: Workplace Conditions for School Success," *American Educational Research Journal*, Vol. 19, No. 3, Fall 1982; and Susan J. Rosenholtz, *Teachers Workplace: The Social Organization of Schools*, New York: Longman, 1989.

[2]For example, see Judith Warren Little, "The Persistence of Privacy: Autonomy and Initiative in Teachers' Professional Relations," *Teachers College Record*, Vol. 91, No. 4, Summer 1990.

The literature warns that programmatic devices designed to promote collegiality often fall short of the goal. For example, Little noted that just creating time for teachers to meet together does not automatically result in professional sharing.[3] Hargreaves cautioned that mandated forums for collegiality, or "contrived collegiality," make it difficult for teachers to adjust the program goal to the unique circumstances or needs of a specific school.[4]

In examining how TST influenced the school culture, the program goal was placed in the context of the relevant characteristics of each school. Experiences of the 12 pilot schools related to the program were tracked over a three-year period, and a "snapshot" describing each school was constructed for each year of the study.[5] Comparison of these annual snapshots showed changes in the school characteristics relative to promoting the goals of TST.

DESCRIPTION OF SCHOOL CHARACTERISTICS

The 12 schools in the study encompass a variety of school types. Table 7.1 shows some of the contextual factors describing the schools, including grade level, relative faculty size, and staff turnover at the end of three years. The table also shows what percentage of the faculty had taken or was in the process of taking the TST course for teachers in the spring of 1992.

TST was not introduced into a vacuum; each pilot school already had a culture in which the prevailing norms promoted or discouraged collegiality. Therefore, a high priority was placed on getting a description of the school at the beginning of the program. Year 1 data collection concentrated on the majority of teachers who had not yet participated in the program. Characterizations of the interactions and relations among faculty and administration, as well as other salient descriptions of each school, were derived from information gathered in

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[3]Ibid.

[4]Andy Hargreaves, "Contrived Collegiality: A Sociological Analysis," paper presented at the XIIth Meeting of the International Sociological Association, Madrid, July 9-13, 1990.

[5]Because one of the schools was closed in June 1991, there are descriptions of only 11 schools in Year 3 of the study.

Table 7.1

Characteristics of the 12 Schools

School	Level	Staff Characteristics		
		Size[a]	Turnover[b]	Trained in TST(%)[c]
A	Elementary	Small	High	All
B	Elementary	Small	High	Most
C	Elementary	Small	High	Most
D	Elementary	Moderate	--	All
E	Secondary	Moderate	--	Majority
F	Secondary	Moderate	Low	Most
G	Secondary	Moderate	High	Most
H	Secondary	Large	High	Majority
I	Elementary	Large	High	Majority
J	Elementary	Large	High	Majority
K	Elementary	Large	Low	All
L	Elementary	Large	High	Most

[a]Staff is defined as classroom teachers, specialists, and resource personnel, such as guidance counselors. Staff size is *small* if 30 or less, *moderate* if 31 to 61, and *large* if more than 60.

[b]Teacher turnover from SY 1989-1990 to SY 1991-1992 is *high* if 25 percent or more and *low* if less than 15 percent. Turnover in the remaining schools falls in the 15 to 24 percent range.

[c]Percentage of teachers attending TST course by spring of 1992 described as *majority* if 51 to 65 percent attended, *most* if 66 to 80 percent attended, and *all* if over 81 percent attended.

field interviews with trained and nontrained faculty, administrators, and parents, as well as data collected through a survey of teacher interactions and relevant school documents. The Year 1 "snapshot" described each school using four sets of characteristics: patterns of staff interaction, other influences on the environment, administrators' expectations regarding the TST program, and teachers' expectations of the TST program.

In Year 2 and Year 3 of the study, field teams updated the baseline descriptions and collected data for two additional sets of school characteristics: the principal's actions in support of TST and the experience of the study group. Interviews with administrators and faculty continued to be a major source of information, as well as

relevant documentation and data collected through a teacher survey addressing the range of various collegial interactions in the school.[6]

Brief descriptions of each set of characteristics follow:

1. **Patterns of Staff Interaction.** Although individuals and groups of teachers can display varying patterns of interaction within the same school, the following three generalized descriptions attempt to capture the predominant pattern:

   - *Isolation.* Teachers form small cliques or work alone. While faculty may ask neighboring teachers or resource personnel for help and new ideas, they tend toward self-reliance.
   - *Cooperation.* Teachers often share materials and ideas; they feel comfortable going to each other for help. However, there are few formalized collegial arrangements or routine examples of teachers working with other teachers.
   - *Collaboration.* These schools embody the patterns of the cooperative schools but the character of that cooperation has a more professional than social basis. There are more frequent examples of organized collaboration such as teaming and intergrade projects.

2. **Other Influences on the Environment.** Other programs and issues in a school can complement or compete with TST:

   - *Competing Influences.* Influences are described as competing if they divert attention and energy from the staff development program or if they promote effects that counter the desired effects of the TST program.
   - *Neutral Influences.* Other issues or programs exist but do not appear to affect the school's receptivity to the staff development program.

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[6]The three appendixes document the field interviews and teacher surveys administered each year of the study.

- *Complementary influences.* Influences are described as complementary if they mesh well with the staff development program or if they interact with the program in a synergistic fashion that positively increases its impact.

3. **Administrators' Expectations for TST.** Different views of TST are reflected in the administrators' goals and expectations for the program in their own school:

   - *No specific Expectations.* Administrators are somewhat skeptical of the program's value to them as administrators. They view TST as primarily benefiting those teachers who already are perceived as good practitioners. These administrators do not link the program with possible changes in the school culture.
   - *Teacher Development.* Administrators tend to view the program as a course in teacher skills and have low expectations about the effects of the program beyond the course.
   - *School Culture.* Administrators hold high expectations about the effects of the program beyond the course. They envision the possibility that TST could influence the work environment and become an integral part of the school life.

4. **Teachers' Expectations for TST.** Teachers also have expectations concerning the effects of the program on the administrators and staff as well as the school as a work environment:

   - *No Definite Expectations.* Teachers have no expectations for the program beyond taking the course.
   - *Teacher Development.* Teachers view the course in terms of their own or other teachers' development. They perceive they have changed in some of their teaching practices as a result of the program.

- *School Culture.* Teachers view the course as just the beginning of a program that could permeate their work environment. They perceive the program can affect not only individual teaching practices but also the school as a workplace.

5. **Principals' Actions.** The principals' actions on behalf of TST reflect his or her level of involvement in the program and leadership style. The resulting behaviors are generally characterized as follows:

   - *Laissez-Faire or Coercive.* These describe two totally opposite behavior patterns, but both tend to be less conducive to fostering the program goals. *Laissez-faire* principals have low involvement in the program, seek no identity with TST, and do little to promote TST beyond signing up teachers for the course. *Coercive* principals identify themselves with TST and enthusiastically promote the program by casting teacher participation as an expectation or requirement.
   - *Cheerleader.* The principal is identified with TST and actively encourages teacher participation by looking for ways to advertise TST or make it easier to join program activities.
   - *Participatory.* The principal is a cheerleader who also works with teachers to promote the integration of TST goals into the overall school ethos.

6. **Study-Group Experience.** Study groups vary in terms of activity, participation, and administrative support. The following are generalized characterizations of study group experiences:

   - *Floundering.* There is a low level of study-group activity. The BBF finds it a struggle to schedule the minimally required number of meetings. Attendance is low,

and trained teachers demonstrate little interest in becoming involved. The principal has either tried to require attendance or ignored the group's existence.

- *Functioning*. The group is organized, meets at least the minimally required number of times, and attracts enough participants to function. Teachers voluntarily attend but often cite the problems of conflicting schedules and other responsibilities. The principal sometimes attends the meetings.
- *Accelerating*. The group meets frequently and is well organized. The BBF is a respected teacher who consults participants concerning meeting topics. The principal very often attends the meetings.

COMPARISON OF BASELINE, YEAR 2, AND YEAR 3 SCHOOL CHARACTERISTICS

Placing the number of schools demonstrating each characteristic in a matrix format provides a visual display of the relative receptivity to the program each year. Figure 7.1 shows the baseline year snapshot based on the first four factors. The descriptors are arranged linearly, from the least conducive to the most conducive, in terms of fostering program goals. Figures 7.2 and 7.3 provide the same information for Year 2 and Year 3 but include the descriptors of two additional factors. Comparison of the snapshots reveals relative movement toward the left or right side of the chart, i.e., whether the schools in this study demonstrated characteristics increasingly more or less conducive to the goals of TST when compared over the three years.

To determine what changes occurred at the school level, the patterns of all the factors for that school were examined year by year. If the characteristics were clustered in a pattern toward the left side of the chart, the school was classified as *less conducive* to the program goals in that particular year. Conversely, if a school's characteristics tended to be clustered along the right side of the chart, it could be described as *very conducive* to the adoption of the program's goals. Schools whose characteristics were clustered toward the middle of the chart were described as *somewhat conducive* to TST.

School Characteristics	Less Conducive ◄——► More Conducive		
Patterns of Interaction	Isolation (4)	Cooperation (5)	Collaboration (3)
Other Influences on School Environment	Competing (3)	Neutral (6)	Complementary (3)
Administration Expectations for TST	No Specific Expectations (2)	Teacher Development (7)	School Culture (3)
Faculty Expectations for TST	No Specific Expectations (1)	Teacher Development (8)	School Culture (3)

Key: Number of schools in each category is shown in parenthesis.

Figure 7.1--Baseline Characteristics Influencing Program Implementation in the 12 Schools

School Characteristics	Less Conducive	◄——►	More Conducive
Patterns of Interaction	Isolation (2)	Cooperation (5)	Collaboration (5)
Other Influences on School Environment	Competing (3)	Neutral (7)	Complementary (2)
Administration Expectations for TST	No Specific Expectations (2)	Teacher Development (6)	School Culture (4)
Faculty Expectations for TST	No Specific Expectations (1)	Teacher Development (7)	School Culture (4)
Principal's Actions	Laissez-faire or Coercive (6)	Cheerleader (4)	Participatory (2)
Experience of Study Group	Floundering (4)	Functioning (6)	Accelerating (2)

Figure 7.2--Year Two Characteristics Influencing Program Implementation in the 12 Schools

School Characteristics	Less Conducive ◄——►		More Conducive
Patterns of Interaction	Isolation (1)	Cooperation (8)	Collaboration (2)
Other Influences on School Environment	Competing (5)	Neutral (3)	Complementary (3)
Administration Expectations for TST	No Specific Expectations (2)	Teacher Development (8)	School Culture (1)
Faculty Expectations for TST	No Specific Expectations (0)	Teacher Development (9)	School Culture (2)
Principal's Actions	Laissez-faire or Coercive (4)	Cheerleader (5)	Participatory (2)
Experience of Study Group	Floundering (2)	Functioning (7)	Accelerating (2)

Figure 7.3--Year Three Characteristics Influencing Program Implementation in the 11 Schools

Finally, a school displayed a *mixed pattern* if factors appeared in both the left and right sides of the chart, indicating conflicting signals within the school about the staff development program.

Table 7.2 summarizes the changes in school characteristics by showing the percentage of schools demonstrating each pattern in each year of the study. The table shows that in Year 1, the baseline year of the study, the schools were fairly evenly distributed in terms of the patterns of characteristics. TST was introduced into a variety of school environments, some more predisposed to support program adoption than others.

In Year 2, Table 7.2 shows a decrease in the percentage of schools with less-conducive or mixed patterns and an increase in schools with patterns somewhat or very conducive to the adoption of the program goals. In terms of the matrix, this indicates that some schools were beginning to shift toward the middle and right side of the chart. As the program implementation proceeded, one would expect to see such a shift. In the case of TST, the Year 2 marked the increased availability of the program courses and the creation of the BBF position.

In Year 3, a new shift in the distribution of patterns occurred. The majority of schools had a somewhat conducive pattern, while the percentage of schools with very conducive or mixed patterns decreased. In terms of the matrix, this indicated that there was a shift toward the middle of the chart. In part, this change reflected the general environment throughout the DoDDS-Germany Region in Year 3, when the drawdown of U.S. troops and its impact on DoDDS preoccupied the staff of many schools in the study. Another explanation for the change in Year 3 was that once the program had been implemented in the pilot schools, the attention of the staff moved on to the next initiative or issue, and the more lasting effect of the program was a modest overall shift to schools having characteristics somewhat conducive to a changed culture.

To provide a better undertanding of the change in the overall patterns, Table 7.3 shows the percentages of schools that are characterized by less, somewhat, or more conducive descriptors for each factor in each year of the study. This makes it easier to identify trends by specific factors. For example, the table shows that, in each

Table 7.2

Changes in Patterns of School Characteristics Influencing Program Implementation

	Percentage of Schools with Characteristics			
	Less Conducive	Somewhat Conducive	Very Conducive	Mixed Pattern
Year 1	25	25	17	33
Year 2	17	42	25	17
Year 3	18	64	9	9

Table 7.3

School Characteristics Influencing Program Implementation Over Time

	Percentage of Schools in Which Each Characteristic Is		
	Less Conducive	Somewhat Conducive	More Conducive
Patterns of Interaction			
Year 1	33	42	25
Year 2	17	42	42
Year 3	9	73	18
Other Influences			
Year 1	25	50	25
Year 2	25	58	17
Year 3	45	27	27
Administration Expectations for TST			
Year 1	17	58	25
Year 2	17	50	33
Year 3	18	73	9
Faculty Expectations for TST			
Year 1	8	67	25
Year 2	8	58	33
Year 3	0	82	18
Principal's Actions			
Year 2	50	33	17
Year 3	36	45	18
Experience of Study Group			
Year 2	33	50	17
Year 3	18	64	18

year, there was a decline in the percentage of schools less conducive to the program goals in terms of the pattern of staff interactions. That is, teachers worked in relative isolation in one-third of the schools the baseline year, in less than one-fifth of the schools in Year 2, and in only about one-tenth of the schools Year 3.

The table also indicates that changes in patterns of faculty interactions and the expectations of both administrators and faculty underlay the shift in Year 2 toward school environments that were very conducive to the program goals.

In contrast, the shift in Year 3 to the majority of schools having somewhat conducive patterns appears to have been based on almost all the factors shifting toward the middle; i.e., the increase represents both a decline in the percentage of schools demonstrating more-conducive characteristics but also a decline in the percentage of schools demonstrating less-conducive characteristics. The exception is in the category of other influences. The great increase in the percentage of schools characterized as less conducive due to competing influences reflects the preoccupation in many schools over the effects of the drawdown on staff assignments.

The descriptors used in the matrix also provide clues about the extent to which the schools varied in their implementation of TST. The "other influences" category, for example, juxtaposes competing and complementary programs and issues as being less conducive versus very conducive to the goals of TST. However, in comparing experiences of the specific pilot schools, the same program or activity appeared to be a competing element in one school but a complementary activity in another school. For example, the new NCA review often competed for the time and energy of the faculty, but in at least one school, NCA also was a complementary activity. The reason behind this apparent paradox becomes evident when the experiences of the schools are grouped by pattern.

DESCRIPTION OF SCHOOLS BY PATTERNS OF CHARACTERISTICS

Another way of using the matrix is to look at the commonality in schools exhibiting each of the four patterns--less conducive, somewhat conducive, very conducive, and mixed--and identify the changes that

occurred to move a school from one pattern to another over the three years.

Schools with Less-Conducive Patterns

In at least one of the three years of the study, four schools had characteristics that generally were *less conducive* to the goals of TST. Three schools fit this pattern at the beginning of the study; the fourth school moved into this category in the last year.

In all but one case, the workplace environment was dominated by a divisive issue or atmosphere that separated staff member from staff member or staff from administration. In the fourth school, the perceived need for more discipline and order, coupled with the imminent closing of the school, preoccupied staff members and limited their interactions.

In all instances, the staffs of these schools were isolated. They tended to be cliquish and did not consider it part of the culture of the school to make suggestions regarding another teacher's classroom activities. Because these tended to be secondary schools, the small number of faculty in the field probably reinforced the isolation.

In such an atmosphere, TST was often perceived as irrelevant to changing the school, or worse, became enmeshed in the ongoing struggle within the school. For example, principals in these schools tended to select BBFs whom staff identified as strong supporters of the principal's position in whatever issues divided the school. In two instances, divisions between staff and administrators were exacerbated after the principal tried to make staff participation in TST mandatory.

In these schools, TST primarily was perceived as being courses for teachers rather than school-based activities, with the benefit for the school being what each teacher took from that course. Study groups were either defunct or barely operating; principals could find no teachers willing to replace departing BBFs.

Two of the three schools classified as *less conducive* in the baseline year changed during the course of the study, and the patterns of school characteristics exhibited by these two schools were relabeled as *somewhat conducive* to the program. Such shifts occurred only after

the issues dividing administrators and staff were resolved or dissipated. This affected the underlying patterns of interaction among the staff as some of the barriers to increased cooperation within the school were removed. In the field interviews, teachers would declare that the school had changed, that it was not the same place they had described in previous interviews. This was reflected in the teacher surveys, which recorded marked increases in teachers talking with other teachers at these two schools, although primarily on a congenial rather than a collegial level.[7] Attitudes toward TST changed, and the faculty demonstrated increased support for the study group, which began functioning on a more routine basis.

Schools Somewhat Conducive to TST

By the end of the study, most schools displayed characteristics *somewhat conducive* to the program goals. A total of eight schools, or two-thirds of the sample, fit this description in at least one year of the program. As Tables 7.2 and 7.3 indicate, the most significant trend over the course of the study was the tendency for the characteristics of schools originally placed at both the left and right sides of the matrix to shift toward the center. It is not surprising therefore that, in Year 2 and Year 3 of the study, a total of five schools moved into this category, having previously been described as *less conducive* (two schools), *very conducive* (one school), or *mixed pattern* (two schools).

This category includes a core group of three medium to large schools that were classified as *somewhat conducive* in the baseline year throughout the study. In these schools, administrators and staff generally focused their attention on the day-to-day requirements of the school; they noted that there never was enough time to do everything. Neither administrators nor teachers identified any significant schoolwide initiatives. Activities related to TST had little competition but also limited support. Administrators signed up teachers for courses and attended a few of the study groups. The study groups met fairly regularly, but the BBFs considered them to be of limited success in terms of attendance and the programs presented. Teachers

[7]See Appendix C.

described the study groups as opportunities for camaraderie and for meeting less frequently seen teachers from other parts of the school complex.

The other schools moved into this category and were less static toward the program than the core group described above. These more dynamic schools ran the gamut of sizes and types, including elementary and secondary. Most had been shifted to this category because of changes in the patterns of staff interactions, primarily away from less isolated to more cooperative relations. The increased interaction among the staff often translated into greater support for TST as a program. In fact, three years might not have been long enough to capture completely the growing changes in support of the program. These schools had some of the most successful study groups in terms of making meetings a routine part of the school calendar.

In two instances, schools that had once been described as very conducive became only somewhat conducive. In both schools, preoccupation with other issues and activities contributed to the shift toward this midlevel category of support. TST continued to exist but no longer served as a priority within the school--a view expressed by both the administrators, who tended to become laissez-faire even if they were more active supporters of the program in the past, and the faculty members, who cited increasing competition for their time.

Schools described as *somewhat conducive* tended to stay in that category. In looking at the changes that took place in Year 1 and Year 2, only one school was reclassified from this category--a school that was going to be closed became *less conducive* in Year 3 of the study.

Schools Very Conducive to TST

One-third of the schools in the study were, at one time or another, described as having characteristics *very conducive* to fostering the goals of TST. All were elementary schools, but they represented a variety of sizes and locations in all other respects.

TST was a priority in all these schools; i.e., administrators had identified TST as a major initiative on the part of DoDDS and therefore looked for ways to support the program in the school. Even more

important, administrators and staff found ways to dedicate time to making TST part of the school--often by incorporating TST in other activities.

Because administrators and staff tended to see the implications of TST as a program that could affect the workplace, they were more likely to relate elements of TST in other aspects of the school. For example, one school adopted an SIP to work on problem solving. This selection complemented both TST and an ongoing math initiative. In another school, the chairman of the NCA committee applied techniques promoted in TST to develop the school's NCA review. Teachers in the same school taught parents a number of teaching practices highlighted in TST as part of the implementation of the Families and Schools Together (FAST) program at that school. In a third school, the fact that a core group of teachers was taking the Mastery in Teaching program at the same time as TST was being introduced into the school resulted in a natural reinforcement of both activities. The result was that many of these programs that competed in other schools became complementary in these schools. TST as a program had begun to spill over as a more general part of the school and its other activities. Teachers in these schools were the most likely to say of the future that TST would continue because the staff members had incorporated TST into their work.

The application of TST to other aspects of the school may explain the fact that schools in this category did not always field the most successful study groups in terms of attendance or routines of meetings. However, in two schools, the study groups were more successful than others in focusing on a specific aspect of teaching in a more sustained, profound fashion. Study-group members were willing to devote more time, either in a longer meeting session or over several sessions, to consider the topic. Attendees often cited such meetings as the most relevant part of TST to their classroom activities.

The fact that three schools did not continue in this category reflects the fragility of the school culture. Although the shift in at least one instance was due to the effects of the drawdown on the school, internal issues precipitated the change in the other two schools. In one school, a change in the school day schedule reduced staff time

outside the classroom at the same time that declining commitment on the part of the administrators resulted in a program that was perceived as less central to the school. In the other school, the coercive actions of the principal to require study-group attendance altered the staff's perception of TST. As a result, program participation became an issue dividing rather than joining administrators and staff. In an almost mirror image of the comments teachers made when the climate improved in *less conducive* schools, teachers interviewed in these schools volunteered that this was not the same school as the previous year.

Schools with a Mixed Pattern

During the three years of the study, five schools were classified as having a mixed pattern of characteristics fostering the goals of TST; i.e., the schools displayed both *less* and *very conducive* characteristics. Most of the schools in this category were small elementary schools with fairly substantial turnover rates. In the baseline snapshot, this was the largest category, with one-third of the pilot schools described as having a mixed pattern of characteristics. By Year 3, it was the smallest category, containing only one school.

The high percentage of schools starting in this category primarily reflected the initial confusion concerning the purpose and scope of TST. The schools appeared in this category because staff and administrators had varying views of what the program was about and whether it was important to the school. For example, in one school, key teachers realized the potential of TST to influence the school culture and began devising ways to include it in department meetings and other school forums. At the same time, the principal saw little value to the school, terming TST a mandated teacher-development program that would make good teachers better but have little or no effect on the other staff. In a second school, the principal recognized and desired the potential effect TST could have on the school culture, but made a competing school-based initiative the priority in the school at the expense of time support for TST.

Changes took place in Year 2 as staff and administrators began to synchronize their views of the program or administrators who had given

less support to the program were replaced by administrators more likely to provide the vision and actions to promote TST. The category might have disappeared altogether were it not for the drawdown. In the last two years, the mixed-pattern schools were primarily ones that had been very adversely affected by the drawdown, a circumstance that overshadowed continued strong support for TST.

Contextual and Other Factors

In trying to determine what factors influenced program adoption, several other characteristics were examined. These generally contextual factors did not prove to be a hindrance to the program.

School Type. Both elementary and secondary schools showed relative improvement over the three-year period. In fact, although most of the high schools began on the left, or *less conducive*, side of the chart, none of them ended up there. The fact that none of the high schools was classified as *very conducive* during the study would seem to reinforce the perception that high schools were more difficult to change than elementary schools. In the DoDDS system, the high schools tend to be small. Because the faculty is organized into departments based on disciplines, high school teachers often remarked that they had a limited number of colleagues in their field at the school. This posed an additional challenge to the TST goal of increased collegiality, as the evidence suggests it took high school faculty longer to appreciate the professional benefits of sharing with teachers outside their department and field.

School Size. Schools of all sizes showed high support of TST program goals. Sometimes there were problems in very large schools if the staff was dispersed in several buildings or there were other physical barriers making it more difficult for teachers to engage in collegial activities. But size, in and of itself, did not prove to be a determining factor.

Location. Relative location also did not appear to be a factor. In Germany, some of the pilot schools were relatively more isolated than others in that there were no other schools at that particular location. Again, schools described as isolated did very well in the program.

Turnover. The evidence on whether turnover of staff influenced the program adoption was inconclusive. In the baseline and second years of the study, schools with high turnovers did well in the program. Field interviews indicated that the newer teachers in the school often were the sources of new ideas and more open to change. Because the drawdown depressed the turnover rates in Year 3, it was difficult to determine whether this trend would have continued, especially since a continued high turnover rate would have depleted the number of trained teachers in the school.

There was another aspect to the issue of turnover. There were turnovers in the majority of administrator positions in the 12 pilot schools. This would have been devastating to implementing most programs. However, because all the administrators in the Germany Region had to take the TST course, most of the new administrators had already been trained in the program, and the change in personnel did not by itself become an impediment.

CONCLUSIONS AND RECOMMENDATIONS

This look at TST as a school-based initiative highlights the need to consider the individual characteristics of a school when implementing a new program. Implementation plans must take into consideration the variability in schools and their environment and must be designed to provide more support to those schools having greater difficulty adopting the goals of the program. Some influences on the school, like preoccupation with the effects of the drawdown, are less amenable to modification than other factors in the school. However, the experience of the 12 pilot schools indicates some ways to facilitate implementation:

- The large number of schools with a mixed pattern in Year 1 of the program suggests that improved communication at the beginning of the implementation about the program goals and design would increase the likelihood that administrators and staff agree on the nature of the program and its possible role in that particular school.

- Some competing initiatives and activities could be turned into more complementary influences, as in the example of the NCA reviews. Staff development and curricular leaders at all levels of DoDDS, as well as the school-based leadership, need to look for more connections between the various initiatives and programs in the school. TST, with its philosophy of exploring teaching in its entirety, would seem particularly amenable to complementing many of the ongoing activities in the school.
- An underlying theme in much of the preceding analysis is the role that time plays in allowing school staffs to use TST. In some respects, this has been a time-rich initiative in that all administrators and teachers have been given the opportunity to use school time to attend eight- and nine-day courses. However, the course just introduces the program, and the goal of changing the school culture requires giving the staff time in a number of formats. The more obvious is providing time for follow-ups to the course, such as a class substitute to do peer observations, or dedicating a time in the school calendar for study-group meetings. The less obvious aspects of time have to do with reducing the competing influences or simply providing staff the time needed for the whole range of collegial interactions that underpin the goal of changing the school culture. An example is the school that had been *very conducive* to TST becoming only *somewhat conducive* after staff time outside the classroom was reduced.
- Even when schools are described as *very conducive*, there is no guarantee that they will continue to be so. Most schools reaching that category eventually slipped back to lower levels of support for the TST goals. The experience of the pilot schools indicates that sustaining the conditions that support TST adoption will be a real challenge. Not only did other programs and events divert the energies of the staff, but after three years, expectations for TST also became less focused as

both administrators and staff became less likely to identify the program as influencing the school culture.

The three snapshots describing the schools over the course of the first three years highlight the need to take a longer a view of the program's influence. Not only do a number of factors influence each school's experience with TST, but there can be significant changes over time that both benefit and hinder the program's adoption. The experiences of the 12 pilot schools tracked in this study were influenced by activities and conditions both at the system level (ODE and the Germany Region) and at the school level. As DoDDS looks to the future of TST and other staff development programs, both levels need to participate in the implementation strategies. The final chapter in this report addresses these lessons.

8. LESSONS LEARNED

Over a relatively short time, the DoDDS-Germany Region achieved a widespread introduction of the TST program to all the administrators and a substantial proportion of the teachers. Participants at all levels of the system perceived benefits from the program, especially in terms of promoting increased awareness and sharing of professional knowledge and experiences. Perhaps the most significant contribution of the program was to provide a common vocabulary for a school system whose staff came with backgrounds in a wide variety of education programs. In addition, the program provided a conceptual framework for studying teaching. The result, as one administrator phrased it, was that "now everyone is singing from the same song sheet." The program provided a common foundation for pursuing the overarching goal of making schools more collegial.

Over the course of this study, the most persistent concern about the program implementation was its lack of focus. The implementation was often driven by the logistics of having to train such a large number of administrators and teachers. Even though substantial participation resulted, those trained in TST were often fuzzy about the goals of the program for the DoDDS system, the connection between the TST training and achieving those goals, and how the TST program fit into the wider context of the school and region. The fact that TST promotes a context-based rather than a prescriptive approach to teaching reinforced the perception of an unfocused program. The frustration of ODE personnel in looking for implementation of specific classroom strategies by teachers reflected the choice of the program and its approach more than any failure of training and implementation.

Thus, while the experience of the schools in this study indicates progress toward the goals established by ODE, that experience also suggests ways the implementation strategy could be revamped to more effectively promote those goals. Recommendations derived from this study center on three aspects of the implementation: communication of program goals and strategies, the depth of the program interventions at

the school level, and long-term support and reinforcement of the program implementation. The lessons learned can be applied to other DoDDS initiatives.

COMMUNICATION

The implementation of TST was plagued from the beginning with uncertainties about the goals and the program agenda. Reviewing participants' perceptions of the three program goals indicates that many never clearly understood the purposes of the program. Almost everyone perceived TST as a teacher-development program but only in a general sense. During the first year, confusion resulted from uncertainty over whether TST would be used as part of teacher evaluation. Teachers noticed differences in the way administrators approached classroom observations but for the most part were unaware of the intended process. Administrators felt free to adjust their use of the model to the circumstances of time and other demands. Many administrators and faculty never perceived that the overarching goal of the program was to influence the school culture.

Finally, the lack of understanding meant that the program interventions designed to promote changes at the school level frequently were weakly implemented. Often, principals and other school leaders did not understand either the goal of changing the school culture or how these activities contributed to that goal. In addition, the leadership at the school had trouble overcoming the hurdles the school day schedule and other programs placed in the way.

Recommendations for improving this aspect of the implementation include the following:

- **Communicate clear definitions of the program goals.** DoDDS needs to present the goals of the program clearly to the administrators and teachers from the outset. This includes providing some standardized guidance to all administrators and teachers concerning classroom observations. If the goal is to implement a new model of classroom observations, everyone needs

to have an understanding of the purpose and format of that model.

- **Train administrators as program promoters.** Administrators must understand the purpose and design of the program, but they also need training on how to promote TST as a school-based initiative.

DEPTH OF INTERVENTIONS

From the beginning, DoDDS faced a dilemma that might be characterized as striking a balance between the depth and the breadth of the program activities. The sheer size of the system and the goal of achieving widespread participation in TST in a relatively short time resulted in an emphasis on trainers providing the courses at the expense of introductory and follow-on activities. In fact, ODE advocated an implementation approach in which access to training would become universal.

The goal of universal access, coupled with the uncertainty about the program goals, contributed to some difficulties with the implementation. For example, some principals tried to require teacher participation even though the major goal of the program was enhancing professional collegiality among administrators and teachers. To maximize attendance, the training schedule drew only a few teachers from several schools to attend each course rather than providing training all at once to a critical mass of each faculty. Thus, teachers often lost the sense that the program targeted changes at the school level. Instead, most viewed this as a program focusing on individual improvement.

Finally, although the program targeted change in the school and its culture, the implementation was weakened because it was not grounded in the identified needs of each school and faculty. Each school started out at a different place relative to the program goals. Yet the implementation process treated the schools in lockstep.

Recommendations addressing these concerns include the following:

- **Pace the implementation in terms of the program goals.** The temptation to put all the resources into offering courses should be resisted, and more time and/or resources should be devoted to setting up the implementation and then providing the needed follow-on activities. If the only goal had been introducing a model for classroom observations, such an approach might have been appropriate. However, changing a school culture and promoting continuous professional development require a long-term process beyond the training provided by the courses.
- **Customize the implementation to the receptivity of each school.** Implementation would be improved if a needs assessment were made prior to the interventions and regional support adjusted to the varying needs of the individual schools. For example, schools could develop their own action plans in terms of the program goals and implementation, thereby increasing the ownership of the program and tailoring the program to that school's needs.

PROGRAM REINFORCEMENT

In promoting real change at the school level, the system and the school leadership must continually signal the importance of the goals and find ways to encourage and sustain progress. Too often, teachers perceive mixed signals: Continue doing peer observations, but figure out how to do it on your own time. Attend study groups, but also participate in these other after-school activities.

The experiences of the DoDDS-Germany schools showed that faculty can be diverted by competing priorities or circumstances. The extent to which follow-on activities are not only provided and supported but also reinforced by other initiatives and activities can promote the long-term incorporation of the program goals into the school. DoDDS leadership at all levels--ODE, the region, the district, and the school--needs to look for ways to support the effort. Leaders need to step back and view how all the initiatives and programs they support interact with each other.

Recommendations addressing this concern include the following:

- **Support school-based activities.** Give teachers the time and encouragement to continue school-based activities, such as peer observations and experimentation with new techniques. The more such practices are promoted through other activities going on in the school, the more likely teachers will adopt them as part of their professional lives.
- **Develop complementarity among program initiatives.** As DoDDS becomes involved in other initiatives, be careful not to undercut TST or other programs held to be important. This applies not only to other staff development initiatives but also to the introduction of new curriculum or imposition of other requirements. Such approaches signal the importance of the program to staff and thereby help make the program a permanent fixture and not just a fad.

Appendix

A. NUMBER OF SCHOOL-BASED INTERVIEWS

This appendix documents the number of interviews conducted at each school in the study by year. The data are further identified by whether the respondents were administrators or teachers.

Table A.1

Interviews at the 12 Pilot Schools 1990-1992

	Total			Administrators			Teachers		
Schools	1990	1991	1992	1990	1991	1992	1990	1991	1992
Augsburg ES	27	33	31	2	3	3	25	30	28
Augsburg HS	28	32	22	2	2	2	26	30	20
Böblingen ES	18	21	15	2	2	1	16	19	13
Kaiserslautern HS	23	22	14	3	1	1	20	21	13
Karlsruhe HS	18	25	22	2	2	2	16	23	20
Kreuzberg ES	16	26	13	2	2	2	14	24	11
Ludwigsburg MS	17	20	18	2	2	2	15	18	16
Mannheim ES	36	32	29	4	2	3	32	30	26
Schwäbisch-Gmünd ES[a]	16	15	--	1	1	--	15	14	--
Schweinfurt ES	37	28	23	3	3	3	34	25	20
Vogelweh ES	28	30	31	2	2	2	26	28	29
Worms ES	15	18	13	1	1	1	14	17	12
Total	279	302	231	26	23	22	253	279	209

[a]Schwäbisch-Gmünd Elementary School closed in June 1991.

B. SCHOOL-BASED INTERVIEW QUESTIONS

Field teams visited each of the 12 pilot schools during the springs of 1990, 1991, and 1992, and conducted 812 interviews with teachers, principals, and other building administrators. This appendix lists the different interview questions for administrators, teachers who had taken the TST course, and teachers who had not taken the TST course. In 1991 and 1992, a separate protocol was also used to interview teachers filling the newly created post of the TST BBF.

FIELD INTERVIEWS IN SPRING 1990

Questions for School Principals and Other Building Administrators

School Information

1. How many students? What is the grade span?
2. How old is the school?
3. Physical description (Barriers to communication, such as separate buildings or wings? Is there a teachers' lounge?)
4. Organizational characteristics:
   - Average class size?
   - Special personnel or instructional arrangements?
   - Organization by team leaders, department chairs, etc.?
5. Personnel
   - How long has the principal been there?
   - Staff
     - How many?
     - Average age/years of experience?
     - Mix (percentage CONUS hires, military dependents)?

Staff Development

6. Besides TST, what other staff development programs have you used over the past five years?
7. What was the origin of these programs? (School-level, district, regional, DoDDS-wide.)

History of Involvement with TST Program

8. This school volunteered to be a pilot school. Could you tell us why? Give us some background as to how this came about?
9. How did you select the program participants?
10. What do you perceive as the goals of the program?
11. What are your expectations concerning the effect of the program on your school?
12. How are you currently involved with the program?
13. What has been your experience so far? Follow-up: What has been the experience of the study groups? What is their purpose? What role has the TST trainer played?
14. What, if anything, has hindered or supported the program?
15. What would you do to improve the program?

Questions for Teachers Who Have Taken the TST Course

1. Why did you get involved in the Study of Teaching program?
2. How do you perceive the program? Would you briefly describe it?
3. What stands out about the course you took? Are there any particular ideas or learning activities that were especially meaningful to you?
4. What effect, if any, do you expect this program to have on you, your colleagues, and administrators in this school?
5. Are you currently involved with the Study of Teaching program in any way? If so, can you explain or list those activities? [If study group is not mentioned then ask what is the purpose of the group and what has been their experience with it.]
6. What, if anything, has proved the greatest hindrance in applying the program's ideas or getting involved with it?
7. What has provided you with the most help or support in pursuing the program? (Follow-up: Do you have time to pursue it?)
8. Has the Study of Teaching affected your work environment at (name of school) in any way? How?
9. Looking back on your career, what has been the most meaningful or influential growth and development experience you have had

as a teacher? How would you compare this program with that experience?

10. Do you have any suggestions for making this program more meaningful for yourself, or other teachers and administrators?

Questions for Faculty Who Had not Taken the Study of Teaching Course

1. In the past year, have you changed your teaching practices in any way? Examples? What prompted the change?
2. Where typically do you get your ideas? Examples?
3. Has DoDDS given you opportunities to learn new things? How?
4. If you need help, where do you get help? Examples?
5. What do you talk about:
   - In the teachers' lounge?
   - At faculty meetings?
   - At department meetings?
6. Are there teachers who are leaders in this school? How do they demonstrate leadership?
7. We have been learning something of the way in which teachers are evaluated in DoDDS. Currently, how does the evaluation process affect your teaching?
8. Can you give examples of teachers working with other teachers in this school?
9. In the medical profession some doctors have their own practice, some are members of group practices, and some are in health maintenance organizations (HMOs). If you had to choose one, which is most like your experience in this school? [Alternatively, respondents were sometimes asked to provide their own metaphor, or complete the sentence, "This school is like _____."]
10. Have you heard about the Study of Teaching program? What have you heard? What do you think about it?

FIELD INTERVIEWS IN SPRING 1991

Questions for School Principals and Other Building Administrators

[If this is the first year for a principal or administrator in this school, then ask if they have taken the TST administrator's course.]

1. At this juncture, what do you see as the goals of the TST program in this school?
2. What is happening in the school now? [Besides what is going on in terms of school-level activities, are there still faculty interested in taking the course?]
3. Can you give us examples of how this program has affected your school? What are the most significant things, and how did they come about?
4. What do you see as your role in the program? Can you tell us some of the things that you are doing?
5. What, if anything, in the TST program has been helpful to you as a principal in promoting collegiality in this school?
   Experimentation?
   Reaching out to the knowledge base?
6. What has been your school's experience with the study group(s)? [Who participates, how organized, frequency of sessions, what they do, sustained enthusiasm.]
   What would you like to see happen with them?
   What role do you play? (Attend, help create time for, etc.)
   What is the role of the BBF (building-based facilitator) in the school?
   How was he/she selected?
7. The TST administrators' course included a process for conducting classroom observation. What is your view of the CEIJ model in your work as a supervisor?
   What ways have you been able to use it?
   How is it helpful? [In observing? Collecting data? Conferencing with teachers? Examples?]

Any drawbacks or difficulties?

8. Last year, we got some feedback from teachers who took the TST course that they had begun to look at classroom observations in a different way. Have you noticed any difference in teachers' reactions or attitudes toward being observed?
9. What are the biggest hurdles you face in helping this school reach the goals of the TST program?
10. Is this school involved in any other initiatives? Relative priority?
11. What would you like to see happening that is not happening, or at least not yet?
12. As DoDDS concludes its second year of the program, what role does the region play in the implementation of TST in this school? Different from last year? [Contacts with regional trainers?]
13. Do you have any suggestions for improving the TST program?

Questions for the Building-Based Facilitator(s)

[Ask for copies of meeting agendas, materials.]

1. What is your job description?
2. How did you come to have this job?
3. What were your goals for the study group when the year began?
4. What is happening in your study group now?
5. How would you like to see the group evolve?
6. Tell me some of the best things that have happened in your study group this year.
7. Who is participating in the group? (Current course takers, first-year trained? Nontrained? Administrators?)
8. What is the relationship with the non-TST teachers? Do they get the newsletter? Are they invited to participate in the group?
9. Describe a typical study group here. (When meet, how frequently, how run, how many attend, topics/program.)

10. What are some of the lessons you have learned? Do you have suggestions for improving the program?
11. Where do you get help or guidance in your new role as school-based facilitator? (Principal? Regional trainer? Etc.)
12. What are the trainers doing in this school?
13. Are you in touch with any facilitators in other schools? (Exchange ideas/experiences?)
14. Although you have been concentrating primarily on the study groups, have you noticed any other TST-related activities or influences in this school? Have the program or study groups triggered any spillover activities?
15. Is this the job that you expected?
16. How much time have you spent on it?
17. What do you predict is going to happen with the program?

Questions for Teachers Who Had Attended the Study of Teaching

1. How are you currently involved in the Study of Teaching program?
2. If in a study group: Would you describe what is happening in your study group? Is it helpful to you? [Examples.] Do you think you will continue to participate in the group?
   If not in a study group: Why not?
3. Now that you are done with the course, what did you get out of the program? Has anything changed for you?
4. Has this school changed? (How? Examples.)
5. How are the administrators involved in the TST program?

Optional Questions

6. The TST program includes training the administrators in classroom observation and teacher conferencing techniques. How are your administrators using these?
7. One of the phrases you hear used by the TST trainers is "Reaching out to the knowledge base." What does that mean? Has it influenced the resources available to you and how you use them?

8. In your classroom teaching, are you experimenting with anything new? (what they are doing, where they got the idea from.)
9. What would you say are the big priorities in this school this year? What is on everyone's mind?
10. When we come back next year, what do you expect we will find in terms of the Study of Teaching program in this school?

Questions for Faculty Who Had not Taken the Study of Teaching Course

1. During the past two years, DoDDS has been introducing a new staff development program called the Study of Teaching. Could you tell me what your understanding of the program is?
2. Even though you have not taken the course, has the program affected you in any way? Has it influenced this school in any way?
3. How are your school administrators involved in the program?
4. Do you receive any information about the TST program?
   - Regional newsletters?
   - Notices of study group meetings/agendas?
   - Information about signing up for the course?
   - References to the program in faculty meetings or other teachers' meetings?
   - Teachers talking informally about TST in the halls or the faculty lounge?

   Do you know who your school-based facilitator is?
5. What would you say are the big priorities in this school this year? What is on everyone's mind?

FIELD INTERVIEWS IN SPRING 1992

Questions for School Principals and Other Building Administrators

Get background on future of the school.

- How will it fare during the drawdown of troops?
- If reducing the staff, how are you deciding who goes, who stays?
- What effect has the drawdown had on the school/faculty?

If the principal or administrator is new to the school, find out if and when he or she took the TST administrators' course.

1. We are now in the third year of the Study of Teaching Program. What do you see as the goals of the program in this school? Have they changed at all over time?
2. Currently, what program activities are taking place in this school? (Study groups; other school-based activities, such as peer observations; teachers still taking the course?)
3. Can you give us examples of how this program has affected your school? What are the most significant things, and how did they come about?
4. What do you see as your role in the program? Can you tell us some of the things that you are doing?
5. What, if anything, in the TST program has been helpful to you as a principal in promoting collegiality in this school? Experimentation? Reaching out to the knowledge base? Reflecting back, what help could you have used?
6. What has been the experience of the study group(s) over the past year? (Participation, how organized, frequency of sessions, what they do, sustained enthusiasm.) Has the study group changed at all from last year? How?

   What would you like to see happen?

   What role do you play? (Attend, help create time for, etc.)

   What has been the role of the BBF(s)? Any different from last year?
7. In our interviews with teachers over the past two years, we have found a lot of interest in pursuing peer observations beyond the course assignments. Have teachers continued to observe each other in this school? Are there ways you have made it easier for teachers to observe other teachers in this school or in other schools?

8. The TST administrators' course included a process for conducting classroom observation. What is your view of the CEIJ model in your work as supervisor?

   What ways have you been able to use it? Have you made any modifications on the method taught in the course?

   How is it helpful? (In observing? Collecting data? Conferencing with teachers? Examples.)

   Any drawbacks or difficulties?

9. Over the past two years, we have gotten some feedback from teachers who took the TST course that they have begun to look at classroom observations in a different way. Have you noticed any difference in teachers' reactions or attitudes toward being observed?
10. What are the biggest hurdles you face in helping this school reach the goals of the TST program?
12. Is this school involved in any other initiatives? Describe. Relative priority to TST, are the programs complementary?
13. What would you like to see happening that is not currently happening with the program? As you move beyond the course, what is the future of TST in this school?
14. What role has the region played this year in the program? Are you still assigned a regional trainer? What kind of contact do you have with them? What has been the role of ODE?
15. Looking back over the past three years, what kind of help or support could you have used to promote the program in this school?
16. Do you have any recommendations for improving the program?
17. As you contemplate the changes going on in the Germany Region and DoDDS worldwide, will this program have any influence as administrators and teachers transfer from location to location?

Questions for the Building-Based Facilitators

[Ask for copies of meeting agendas, minutes, materials.]

1. What is your job description?

2. IF NEW TO POSITION--How did you come to be the BBF?
   IF RETURNING AS BBF--Has this job gotten harder or easier the second year? Why?
3. What are your goals for the study group? How would you like to see the group evolve?
4. Tell me some of the best things that have happened in your study group this year. What, if anything, have you tried to accomplish this year that was different from last year?
5. Are your study groups growing? Are they getting more support, less support, or just static? Who is invited and who is participating? (Recent course takers, original first-year participants? Nontrained teachers?)
6. Describe a typical study group here. (When and where meet, how often, who presents, how structured, topics/program.)
7. What is the role of the building administrators in the program? What kind of support do they provide you as BBF?
8. What training have you received as the BBF?
9. What is your relationship to the regional trainers? What are the trainers doing in this school now? Is it different from last year?
10. Are you in touch with facilitators from other schools? (Exchange ideas/experiences?)
11. Although you have been concentrating primarily on the study groups, have you noticed any other TST-related activities or influences in this school? Have the program or study groups triggered spillover activities?
12. Now that you have had the TST program in this school for several years, what does the future hold for the study groups? For the program?

Questions for Teachers Who Had Attended the Study of Teaching

1. How are you currently involved in the Study of Teaching program?

2. If in a study group: Would you describe what is happening in your study group? Is it helpful to you? (Examples.) Do you think you will continue to participate?

   If not in a study group, why not?
3. Has the program resulted in any changes for you? As you get farther away from the course, are there any aspects you continue to use?
4. Has the Study of Teaching had any effect on the school as a whole? What would I see this year that I would not have seen last year? Is what you talk about with other teachers different? Is how you talk with other teachers different?
5. One part of the TST course was peer observation. Since completing the course, have you been given opportunities in this school to observe other teachers?
6. How are the administrators involved in the TST program?
7. The TST program includes training the administrators in classroom observation and conferencing techniques. How are your administrators using these?
8. In your classroom teaching, are you experimenting with anything new? Could you tell me what you are doing? Where you got the idea from?
9. What would you say are the big priorities in this school this year? What is on everyone's mind?
10. What do you think will happen to the Study of Teaching program in this school in the future?

C. TEACHER SURVEYS

Data collection included information from the teachers using written questionnaires, which were administered following the interviews in the 12 pilot schools. The questionnaire results in each school were examined in relation to the interview and observation data gathered. The purpose was to determine whether the interaction patterns confirmed or disagreed with the interview and observation findings.

YEAR 1

For the first year of the study, an inventory of teacher interactions was used to supplement our understanding of the existing patterns of interaction in the 12 pilot schools. Only nontrained teachers were asked to complete the checklist so that the baseline data would not be contaminated from teacher interactions generated by the course.

Based on the work of Judith Warren Little, the inventory describes the nature of faculty interactions.[1] As such, they are used as a gross indicator for comparing the relative isolation, cooperation, or collaboration among teachers in these schools. The inventory, which consists of 63 items, and the accompanying directions follow. The asterisks identify the 18 items that Little claims are critical practices that foster "schoolwide norms in support of continuous improvement and receptivity to staff development."[2] The results of Year 1 questionnaires enabled the team to develop a refined, more focused version, which is an adaptation of Little's list and incorporates Rosenholtz's findings concerning teacher collegiality.[3]

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[1]See Judith Warren Little, "Norms of Collegiality and Experimentation: Workplace Conditions for School Success," American Educational Research Journal, Vol. 19, No. 3, Fall 1982.

[2]Ibid., p. 329.

[3]Susan J. Rosenholtz, *Teachers' Workplace: The Social Organization of Schools*, Longman, Inc., 1989.

The following is an inventory of possible ways teachers relate to each other. Please put a check mark next to those entries which characterize your experience in this school.

_____ Lend and borrow materials.
_____ Create a shared file of materials.
_____ Design and prepare materials.*
_____ Review materials or books.
_____ Assign materials or books to grade level or course.
_____ Design curriculum units.*
_____ Research materials and ideas for curriculum.*
_____ Write curriculum.*
_____ Prepare lesson plans with another teacher.*
_____ Review/discuss existing lesson plans.*
_____ Ask for project ideas.
_____ Ask for classroom management ideas.
_____ Ask for help with specific problems of instruction.
_____ Ask for help with specific discipline problems.
_____ Praise other teachers.
_____ Criticize others.
_____ Refer one teacher to another for an idea.
_____ Credit new ideas and programs.*
_____ Discredit new ideas or programs.
_____ Persuade others to try an idea/approach.*
_____ Dissuade others from an idea/approach.
_____ Describe to others an attempt to try something new.
_____ Make collective agreements to participate in a program (e.g., in-service).
_____ Make collective agreements to test an idea.*
_____ Trade teaching assignments/groups.
_____ Invite other teachers to observe.*
_____ Observe other teachers.*
_____ Argue over theory, philosophy, approach.
_____ Confront other teachers on issues of race (e.g., "disparaging remarks").

_____ Analyze practices and effects.*

_____ Praise individual students or classes.

_____ Criticize or complain about individual students or classes.

_____ Teach others in formal in-service.*

_____ Make reports to others in meetings.

_____ Teach others informally.*

_____ Talk "publicly" about what one is learning or wants to learn.*

_____ Attend in-services as groups or teams.

_____ Talk about social/personal life.

_____ Play cards.

_____ Have a beer on Fridays.

_____ Present evidence for student "staffing."

_____ Spread the word about good classes or workshops.

_____ Offer reassurance when others are upset.

_____ Ask informally about what is being covered in other grade levels, classes.

_____ Convert book chapters to reflect new approach (e.g., mastery learning).*

_____ Act as a "buddy" to new teachers.

_____ Suggest that others "try this."

_____ Divide up administrative chores.

_____ Team teach (voluntary).

_____ Team teach (involuntary).

_____ Participate on committees.

_____ Plan how to use new curriculum packages.

_____ Defend or explain specific classroom practices.

_____ Plan how to handle new grade level or course assignment.

_____ Design in-service.*

_____ Work on presentation for conference out of the building.

_____ Reach group agreement on solutions to schoolwide problems.

_____ Decide how to use aides.[4]

_____ Train aides.[4]

---

[4]Elementary schools only--high schools typically do not have aides.

_____ Complain about aides.[4]

_____ Evaluate performance of principals.*

_____ Give advice to others when asked.

_____ Make suggestions without being asked.

YEAR 2 AND YEAR 3

The questionnaire designed for Year 2 and Year 3 covers five areas that reflect the TST definition of "collegiality" based on the work of Judith Warren Little and Susan Rosenholtz.[5] Collegiality is defined as the presence of the following observable behavior patterns: (1) high frequency of teachers talking about teaching in increasingly precise and concrete language; (2) high frequency of teachers observing one another; (3) high frequency of teachers planning, making, and evaluating instructional materials together; (4) teachers teaching each other about teaching; and (5) teachers asking for (and willing to provide one another with) assistance in teaching problems.

In the questionnaire, the items under each heading were selected from those most frequently cited in the Year 1 inventory and from interview responses that best reflected that dimension, modified slightly to emphasize that the activity is performed with other teachers.

The questionnaire was given to trained and nontrained teachers for the third year of the study with two minor modifications. If teachers indicated that they had taken the TST course, they were asked to check when they finished the course. We wanted to separate the early participants from the more recent participants to see if there are any changes in the effect of the training as one gets farther away from the course. The other modification was to an item in the observing dimension. The item was changed from "I observe another teacher considered to be a master teacher" to "I observe another teacher considered to be an expert," because we found some confusion concerning the term "master teacher."

A facsimile of the questionnaire follows.

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[5]See Little, Rosenholtz, op. cit.

1991/1992 RAND/DoDDS Teacher Survey

Grade or Subject Teach _____

Number of Years Taught in this School _____

Taken Study of Teaching (TST) Course Yes _____

No _____

Attached is a list of examples of how teachers interact with each other during the work day. Please tell us how these examples reflect your experience in this school. Mark every item listed using the following definition:

0 - Never or Rarely

1 - Sometimes or Occasionally

2 - Regularly or Often

Please feel free to add your own examples or make other comments which add to our understanding of your experience in this school.

IN THIS SCHOOL WHEN I AM WITH OTHER TEACHERS

0	1	2	We share successes or problems about specific kids or classes.
0	1	2	We discuss what is being covered in other grades or classes.
0	1	2	We talk about what we are learning or want to learn.
0	1	2	We analyze practices and effects.
0	1	2	We talk about families, vacations or sports.
0	1	2	We debate over instructional theories, philosophies or approaches.
0	1	2	We talk about what's going on in the building or region.
0	1	2	Other:

Additional Comments:

IN THIS SCHOOL WHEN I NEED HELP OR GIVE HELP

0	1	2	I ask other teachers for help with specific problems or project ideas.
0	1	2	I ask regional coordinators or teachers in my field in other schools.
0	1	2	I refer one teacher to another for ideas.
0	1	2	I offer reassurance when others are upset.
0	1	2	I act as a "buddy" to new teachers.
0	1	2	I problem solve with colleagues.
0	1	2	I give advice to others when asked.
0	1	2	I make suggestions without being asked.
0	1	2	I work with a committee or team to address schoolwide problems.
0	1	2	I work with the administrators.
0	1	2	Other:

Additional Comments:

IN THIS SCHOOL WHEN PREPARING TEACHING MATERIALS

0	1	2	I lend and borrow materials.
0	1	2	I help create a shared file of materials.
0	1	2	I collaborate with other teachers to design and prepare instructional materials.
0	1	2	I design curriculum units with other teachers.
0	1	2	I prepare lesson plans with other teachers.
0	1	2	I review existing lesson plans with other teachers.
0	1	2	I help convert teaching materials to reflect new approaches.
0	1	2	I help find new research materials and ides for the curriculum.
0	1	2	I collaborate with other teachers in writing a whole curriculum.
0	1	2	Other:

Additional Comments:

IN MY EXPERIENCE WITH TEACHERS OBSERVING

EACH OTHER IN THIS SCHOOL

0	1	2	I invite other teachers to observe me teach something I do well.
0	1	2	I observe other teachers.
0	1	2	I observe another teacher considered to be a master teacher.
0	1	2	I observe teachers in other schools.
0	1	2	I invite other teachers to provide feedback when trying new approaches.
0	1	2	Other:

Additional Comments:

IN MY EXPERIENCE WITH TEACHERS TEACHING

EACH OTHER IN THIS SCHOOL

0	1	2	I volunteer to team teach.
0	1	2	I persuade others to try an idea or approach.
0	1	2	I give information or advice to others concerning an idea or approach.
0	1	2	I teach formal in-service workshops.
0	1	2	I teach others informally.
0	1	2	I describe my attempts to try something new.
0	1	2	I make reports at meetings.
0	1	2	I attend in-service workshops with groups or teams.
0	1	2	I make presentations at professional conferences out of the building.
0	1	2	I share journal articles.
0	1	2	I give demonstrations on how to use new models or strategies.
0	1	2	I coach colleagues who are learning new materials.
0	1	2	Other:

Additional Comments:

FINDINGS

Year 1

The original inventory identified the schools that were the least conducive in terms of the patterns of interaction. In examining the 18 items that Little identifies as critical to fostering norms in support of improvement, the inventory confirmed interview data concerning four schools that were "less conducive" in terms of patterns of interaction. For these schools, at least 75 percent of the teachers checked none of the items.

The Year 1 inventory also showed that at least 75 percent of the nontrained teachers in each of the 12 schools were engaging in the following activities:

1. Lend and borrow materials.
31. Praise individual students or classes.
51. Participate on committees.

Year 2 and Year 3

The same instrument was used for Years 2 and 3 in order to identify changes the respondents reported. To check for a possible TST program effect, we compared the responses of the trained and nontrained teachers. We also compared the trained classroom and trained resource teachers to see whether or not the resource teachers were more likely to engage in certain types of interactions, such as peer observation, because of the nature of their jobs. For Year 3, the teachers who had completed the training by spring 1991 were compared to the recent participants to see if the effect of the training changes as one gets farther away from the course. Table C.1 breaks down the numbers of trained versus nontrained, classroom versus resource, and those who completed the training by spring 1991 versus trained after spring 1991. Of the 248 surveys collected in Year 2 of the study, 73 percent of the respondents were trained in TST; 68 percent of the trained teachers were classroom rather than resource teachers. Of the 198 surveys collected in Year 3, 86 percent of the respondents were trained in

Table C.1

Frequencies of Teachers for 1991 and 1992

	1991		1992	
	Trained	Nontrained	Trained	Nontrained
	182	66	170	28
Classroom	124	--	117	--
Resource	48[a]	--	50[b]	--
Trained Earlyc	--	--	122	--
Trained Recent	--	--	48	--

[a]Ten cases missing this information.
[b]Three cases missing this information.
[c]Completed training by Spring 1991 and trained after Spring 1991.

TST; of the trained teachers, 69 percent were classroom teachers and 72 percent were trained early.

The percentages of "often," "sometimes," and "never" responses were calculated for each of the five dimensions of collegiality on the survey form. We first compared the patterns of responses of the high schools, middle school, and elementary schools to see if they were similar and found only one difference, in the talking dimension, which is described below. There were no other dramatic differences. Subsequently, we combined all schools for the remainder of the analyses. For each year and each of the five dimensions, we compared the patterns of responses. The most significant differences are summarized below.

DIMENSION 1--TEACHERS TALKING TO TEACHERS

Trained Versus Nontrained

The trained teachers who completed the survey in Year 3 (1992) showed a higher percentage of "often" responses than did trained teachers in Year 2 (see Figure C.1 below). This outcome agrees with the comments we received during the interviews; i.e., the teachers trained in TST reported that the program had increased teacher openness and talking with one another.

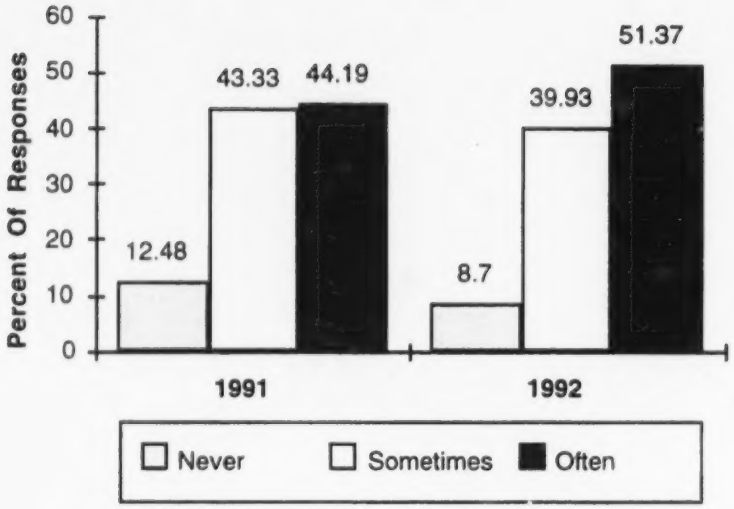

Figure C.1--Trained from 1991 Versus Trained from 1992 on the Talking Dimension--All Schools Combined

Classroom Versus Resource Teachers

For the elementary schools, the trained classroom and resource teachers show the same response pattern, and there is little change from 1991 to 1992. The trained high school resource teachers show a lower percentage of "often" responses than do the trained elementary resource teachers. It is unlikely that this has a connection to the course, but rather is a result of the structural difference between high school and elementary resource classes. The resource teachers in a high school run their own classes and do not have as much opportunity for collegial contact with the classroom teachers as do resource teachers in an elementary school, who often coordinate their activities with the classroom curriculum.

There was a large increase in the percentage of "often" responses for trained high school classroom teachers from 1991 to 1992 (see Figure C.2). This would indicate that trained high school teachers as

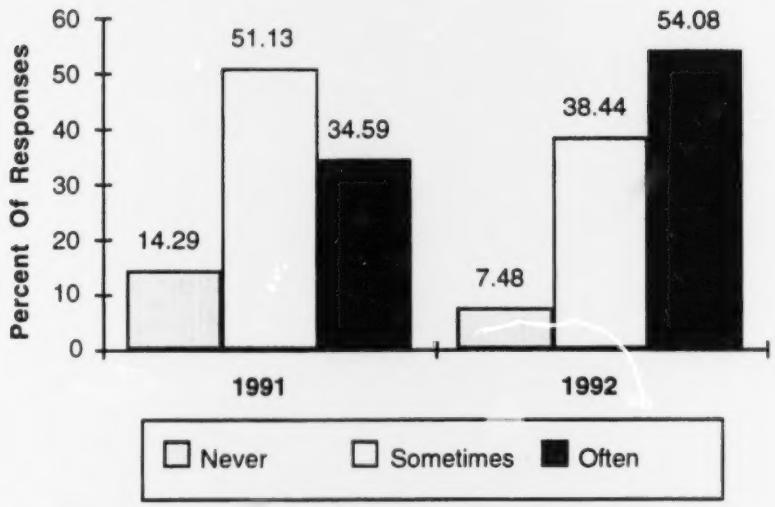

Figure C.2--Trained Classroom Teachers from 1991 Versus 1992 on the Talking Dimension--High Schools Only

a group influenced the increase in teacher-to-teacher talk from 1991 to 1992 shown in Figure C.1.

Trained by Spring 1991 Versus Trained After Spring 1991

The teachers who were trained early had a slightly higher percentage of "often" responses than those trained after spring 1991. This could be a result of the difference in motivation between the teachers who volunteered first and those who became involved later. It might also be accounted for by a difference in the nature of the TST training that those who took the course later received or might reflect increased comfort with the use of collegial practices.

Informal Versus Formal Talking

To further explore differences in teacher-to-teacher responses on the talking dimension, we separated the items into those that are informal types of talking and those that are more professional or formal. The two characteristics are distinguished by the content of the talk.

Informal

1. We share successes or problems about specific kids or classes.
5. We talk about families, vacations or sports.
7. We talk about what's going on in the building or region.

Formal

2. We discuss what is being covered in other grades or classes.
3. We talk about what we are learning or want to learn.
4. We analyze practices and effects.
6. We debate over instructional theories, philosophies or approaches.

Figure C.3 shows that much of the increase in the percentage of "often" responses from 1991 to 1992 involves the more informal rather than the professional or formal talking.

DIMENSION 2--HELPING OTHER TEACHERS

The pattern of responses was similar for all categories of teachers in Years 2 and 3 of the survey. At least 85 percent of all the trained and all the nontrained teachers indicated that they provided help at least sometimes, and about half indicated that they provided help often. This suggests that helping other teachers was already a widespread practice in these schools before teachers were trained in TST.

DIMENSION 3--MATERIALS

Individual Versus Group Efforts

For this dimension, there were no differences in the response patterns for any of the groups we checked. As with the talking dimension, we explored the materials dimension further by dividing the items into two groups. Two of the items refer to activities that a teacher could do alone, while five others require working with other teachers.

Individual

1. I lend and borrow materials.
2. I help create a shared file of materials.

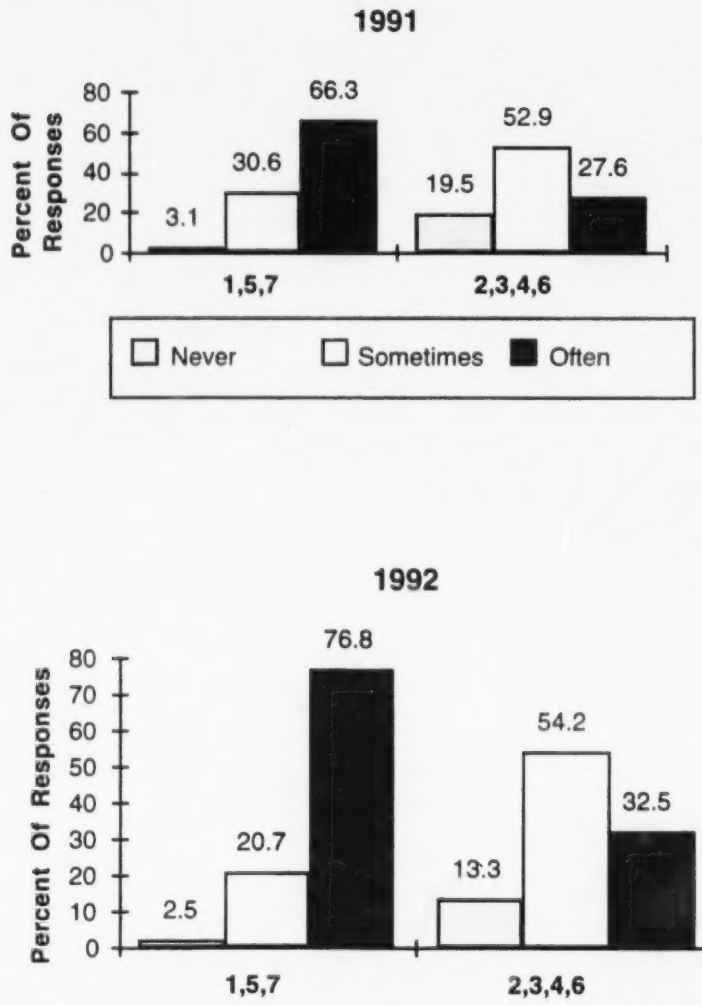

Figure C.3--Informal Versus Formal Talking for 1991 and 1992 Trained Only--All Schools Combined

Group

3. I collaborate with other teachers to design and prepare instructional materials.
4. I design curriculum units with other teachers.
5. I prepare lesson plans with other teachers.
6. I review existing lesson plans with other teachers.

9. I collaborate with other teachers in writing a whole curriculum.

Figure C.4 shows a higher percentage of "often" responses to the items that do not require working together. The 1992 numbers show a large increase in the percentage of "often" responses to individual efforts. For the activities that require working with others, there is a slight shift from 1991 to 1992 with fewer "never" responses and more "sometimes" responses.

DIMENSION 4--OBSERVING

Trained Versus Nontrained

The TST course for teachers includes a module on peer observation; therefore, trained teachers should indicate at least some experience with this activity. Figure C.5 compares the Year 2 response patterns of trained and nontrained teachers for the observation dimension and indicates that neither trained nor nontrained teachers observed other teachers on a frequent basis. However, the response patterns also indicate that most of the trained teachers reported observing other teachers during Year 2 of the study, whereas the majority of the nontrained teachers never observed other teachers in the school. These findings confirm data collected through interviews that TST course work encouraged teachers to participate in a new form of teacher interaction at the pilot schools.

There were no differences in the response patterns for any of the other comparisons; and the response pattern remained similar for Year 3.

DIMENSION 5--TEACHING OTHER TEACHERS

Informal Versus Formal Teaching

There was very little difference among the response patterns for any of the groups we checked. To further explore any possible differences, we separated the items into those that are more formal teaching activities and those that are more informal.

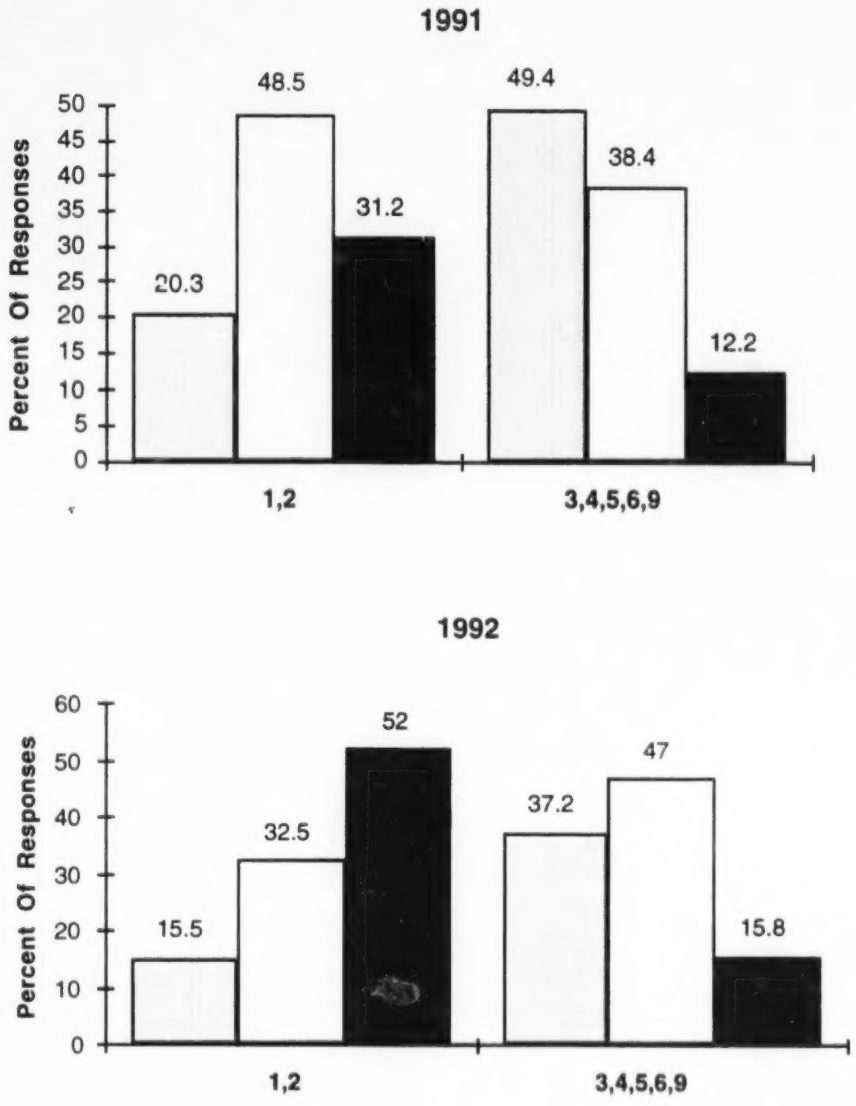

Figure C.4--Individual Versus Group Efforts for 1991 Versus 1992 Trained Only--All Schools Combined

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Figure C.5--Trained Versus Nontrained on the Observing Dimension for 1991--All Schools Combined

Formal

4. I teach formal in-service workshops.
7. I make reports at meetings.
9. I make presentations at professional conferences out of the building.
11. I give demonstrations on how to use new models or strategies.

Informal

2. I persuade others to try an idea or approach.
3. I give information or advice to others concerning an idea or approach.
5. I teach others informally.
6. I describe my attempts to try something new.
10. I share journal articles.
12. I coach colleagues who are learning new materials.

Figure C.6 shows a slight shift toward more "often" responses for both formal and informal teaching activities among the trained teachers from 1991 to 1992.

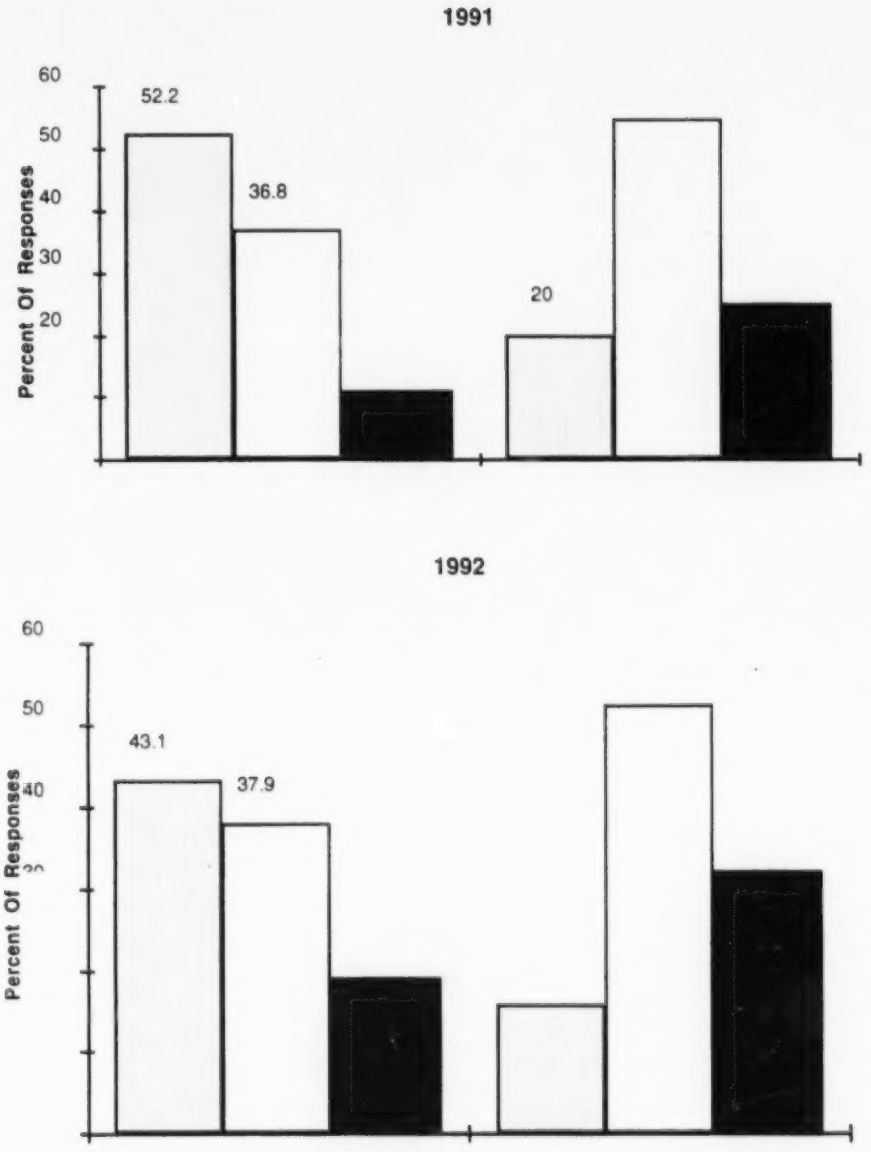

Figure C.6--Formal Versus Informal Teaching for 1991 and 1992 Trained Only--All Schools Combined

SUMMARY

The results of the surveys indicate the following:

- In the first year of the study, teachers in one-fourth of the schools tended to be fairly isolated and did not interact with other teachers in areas Little identified as critical to fostering norms in support of improvement.
- There was an increase in teacher-to-teacher talk among trained teachers in Years 2 and 3 of the study. In particular, trained high school classroom teachers talked to each other more often, but generally on a congenial rather than a collegial basis.
- There was some shift toward increased interactions by trained teachers developing materials, especially on an individual rather than collaborative basis.
- Peer observation in the school was clearly a new experience for teachers in the sample. Therefore, the program effects on teachers observing each other are the most noticeable compared to the more limited changes in the other kinds of teacher interactions collected in the survey.

Because change is a long-term process, it might take longer to find more significant shifts in the patterns of interactions. Ongoing staffing changes throughout the DoDDS system because of the drawdown make it more difficult to identify what factors are influential in promoting collegiality with these schools in the near term. However, DoDDS may want to readminister this survey to the same schools in two or three years to determine if the indications of at least limited shifts toward more collegial interactions continue and increase over time.

MR-531-OSD

ISBN 0-8330-2553-8